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THE INLAND ARCHITECT AND NEWS RECORD

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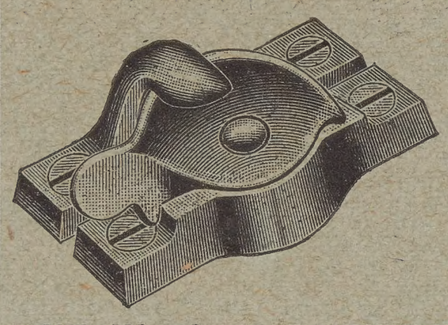

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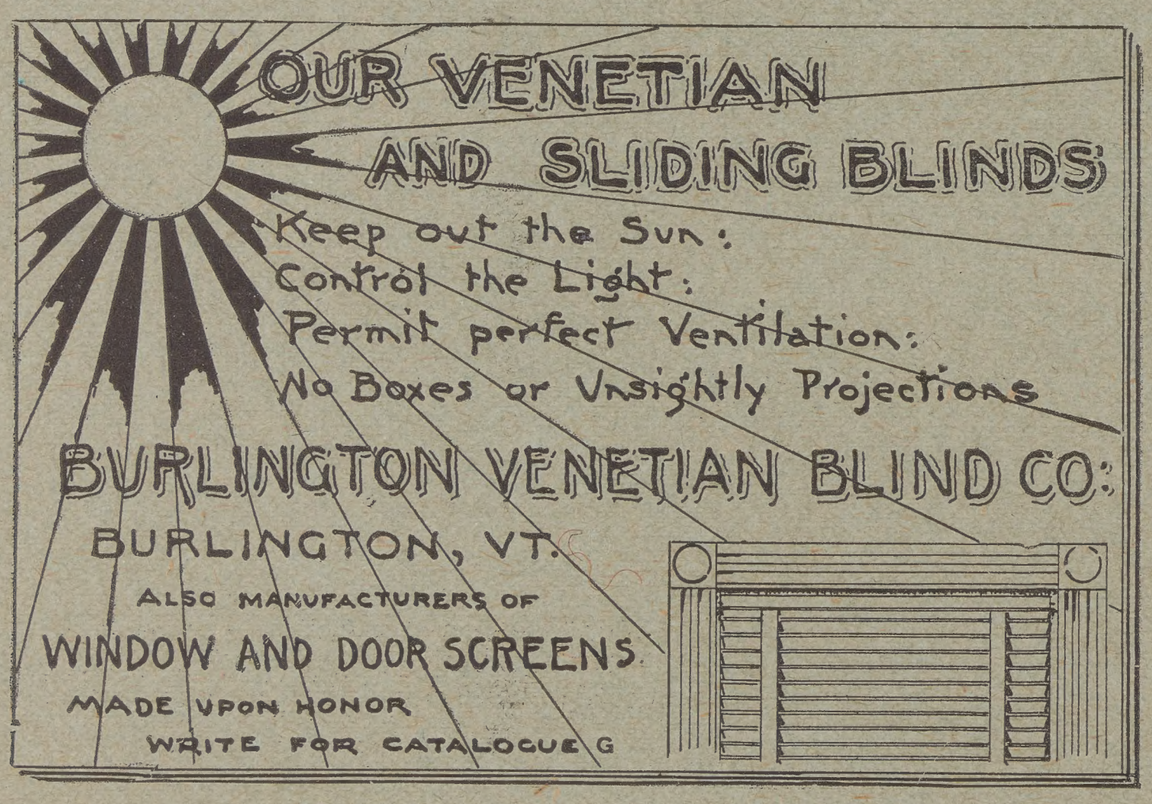

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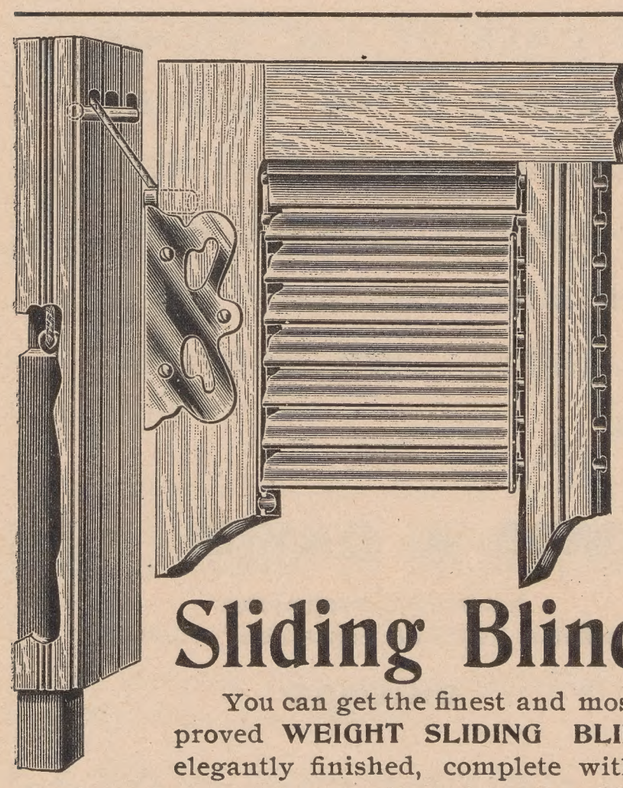

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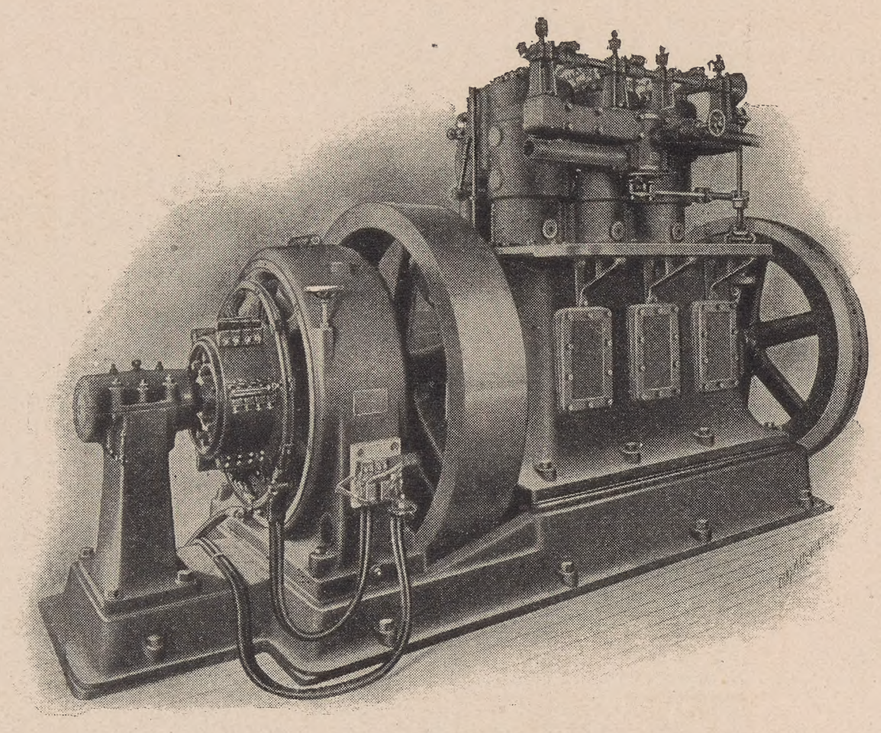

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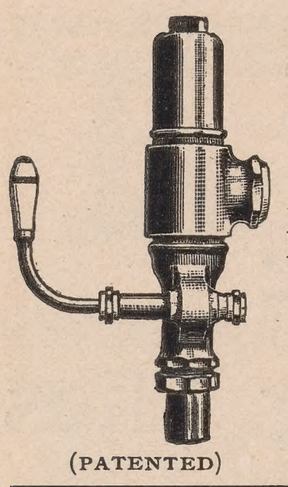

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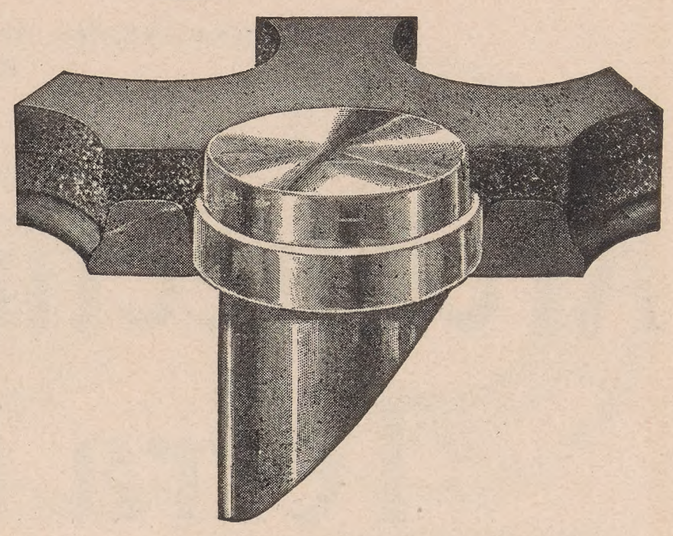

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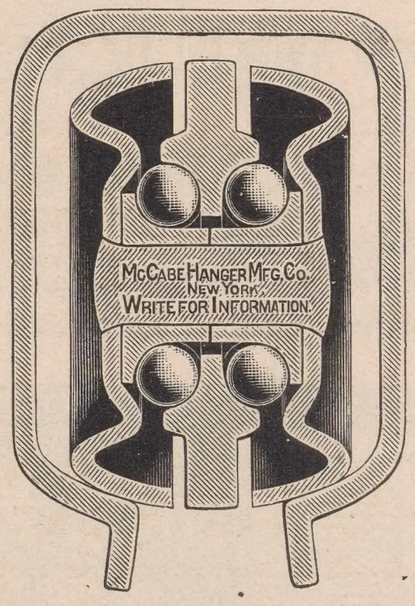

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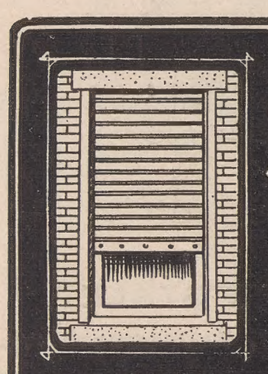

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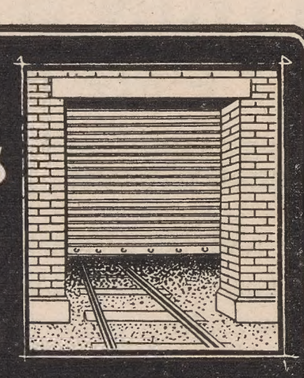

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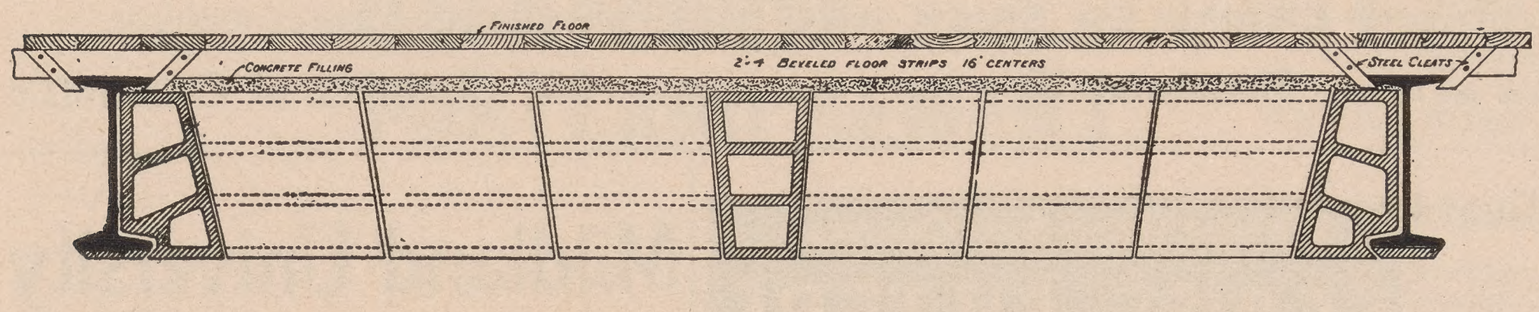

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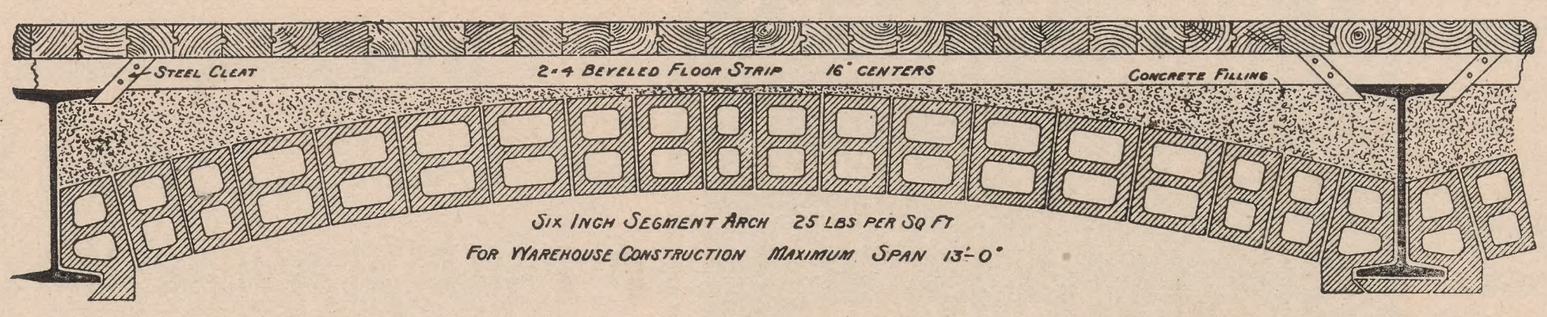
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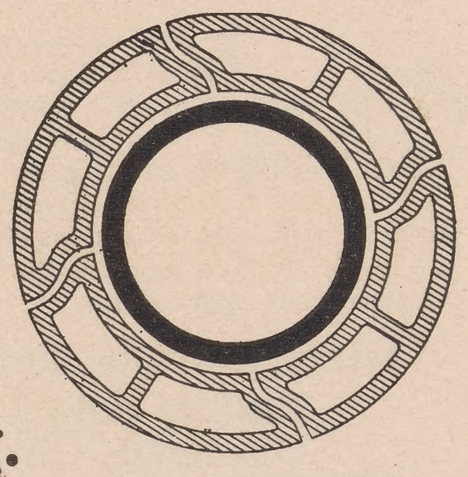

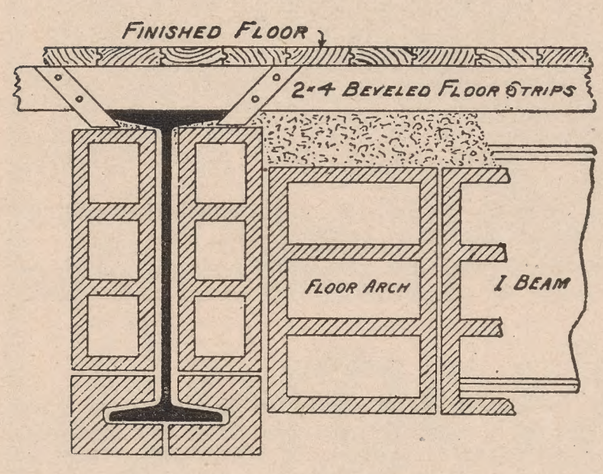

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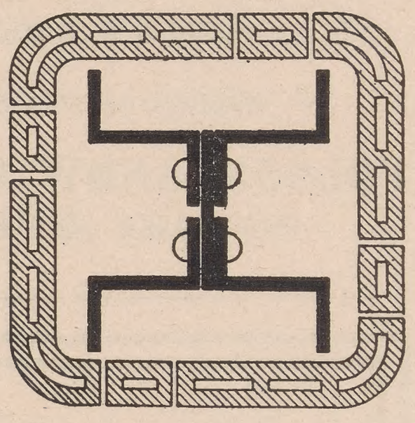

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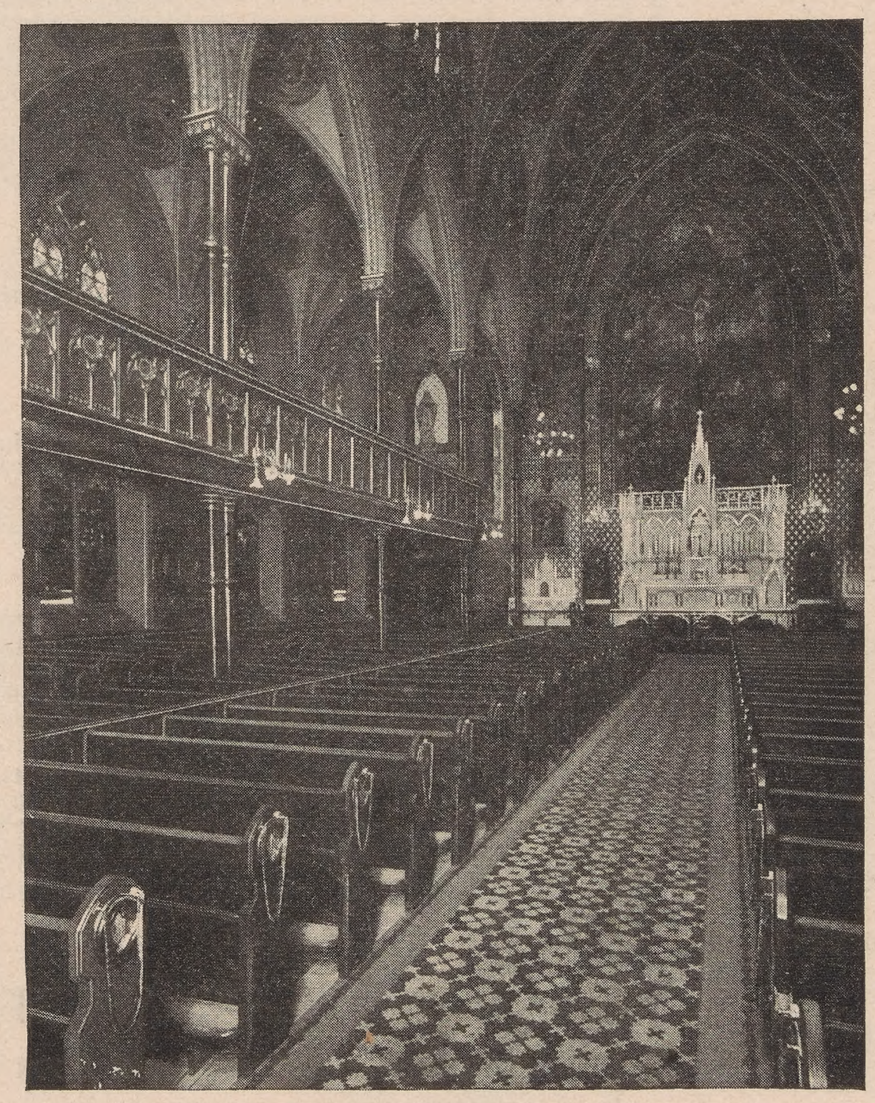

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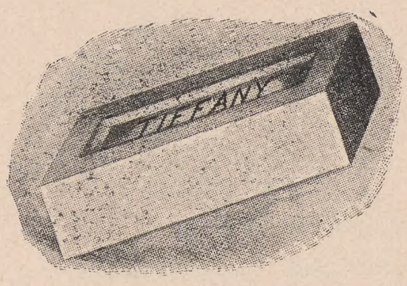

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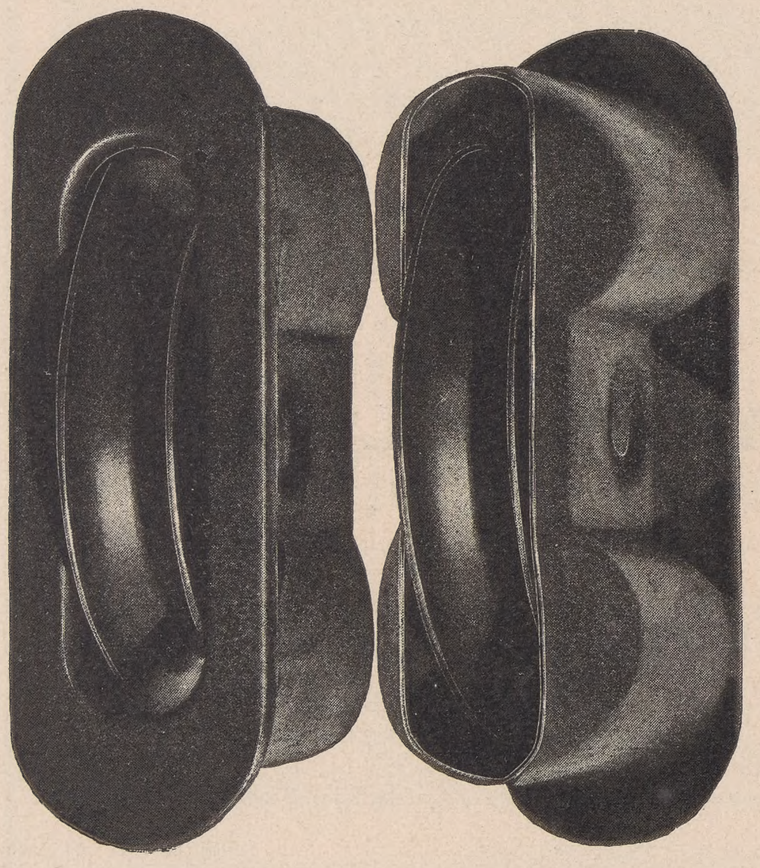

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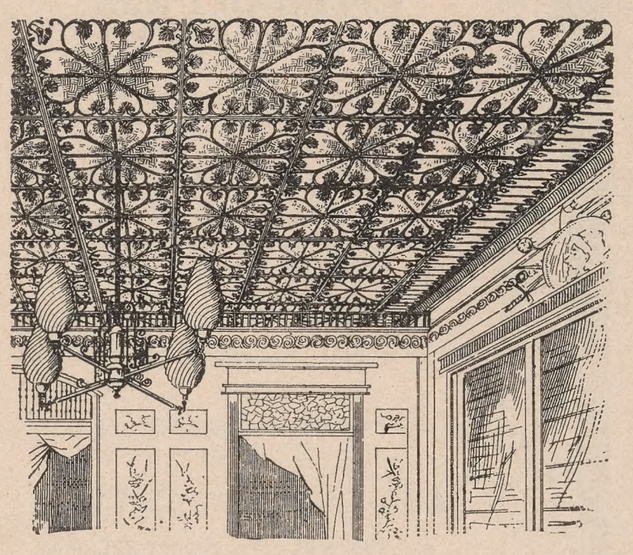

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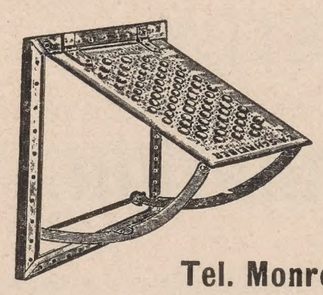

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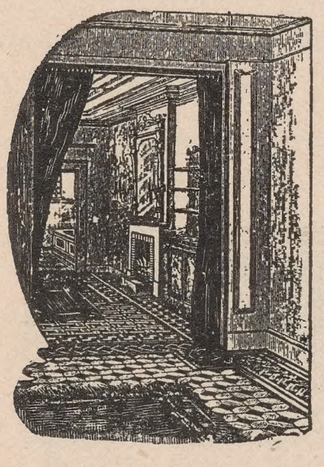

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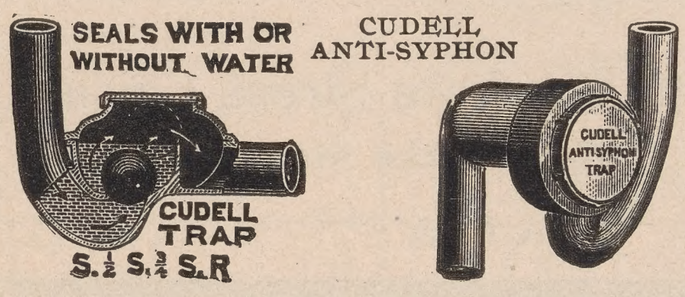

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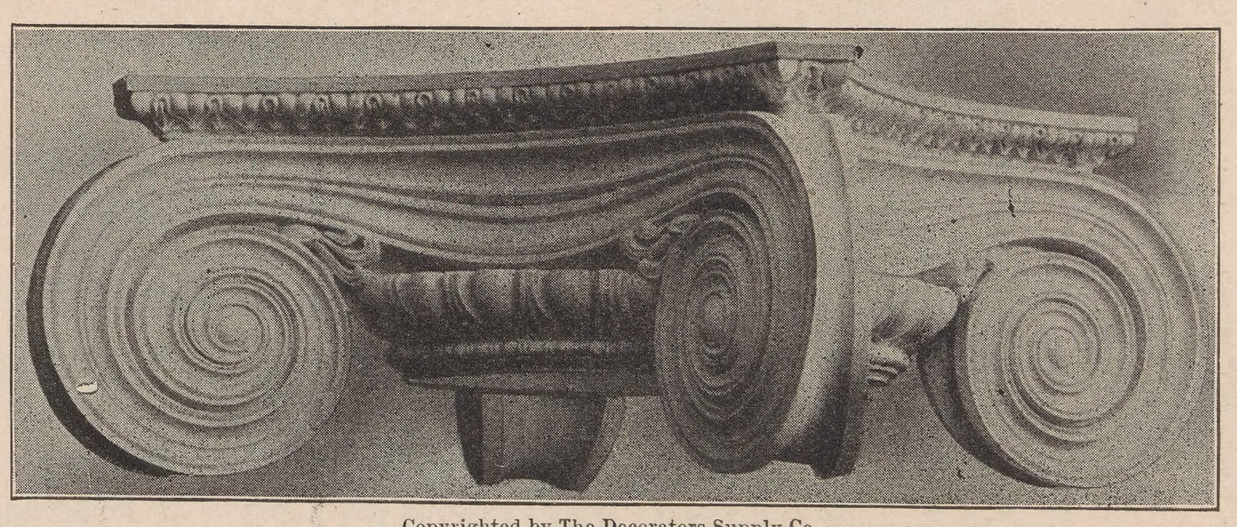

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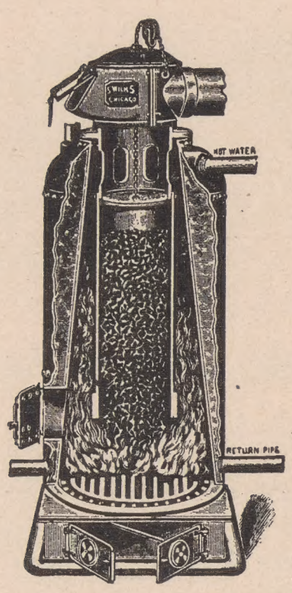

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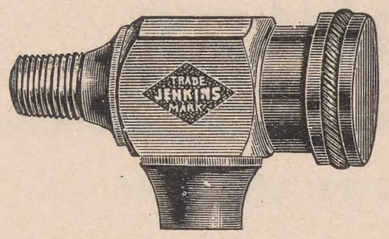

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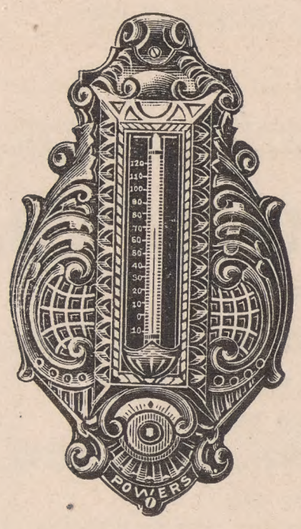

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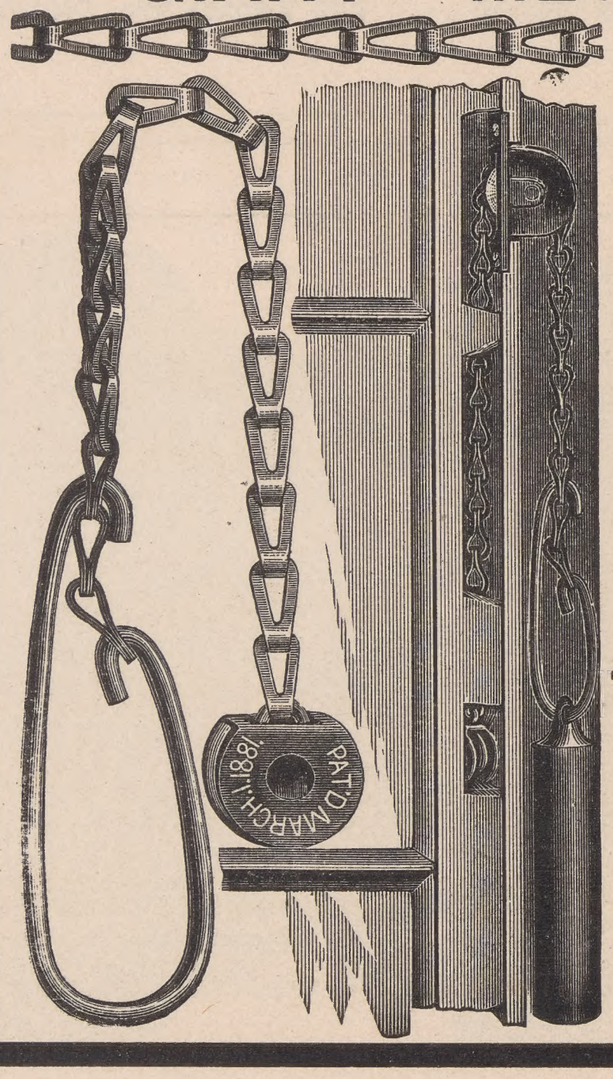

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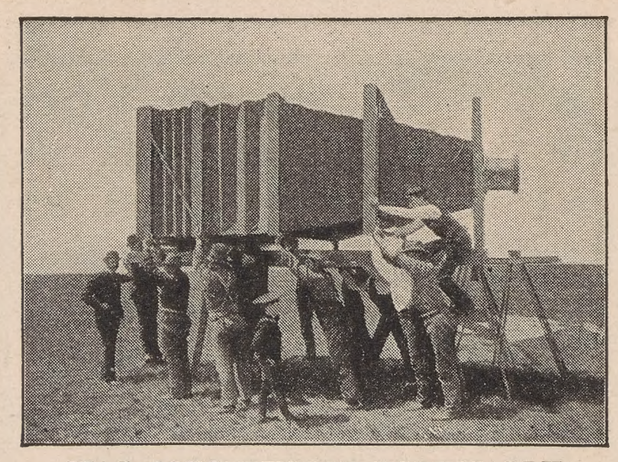

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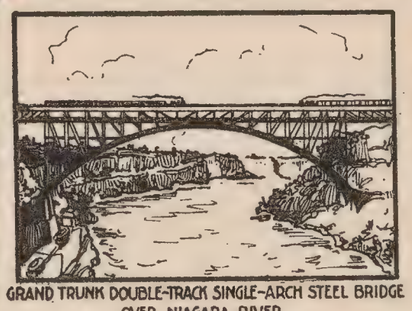
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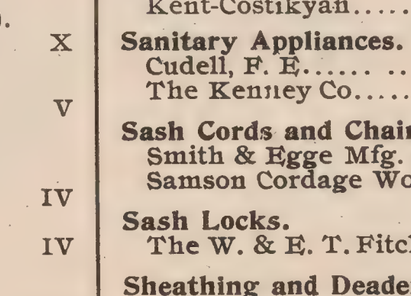
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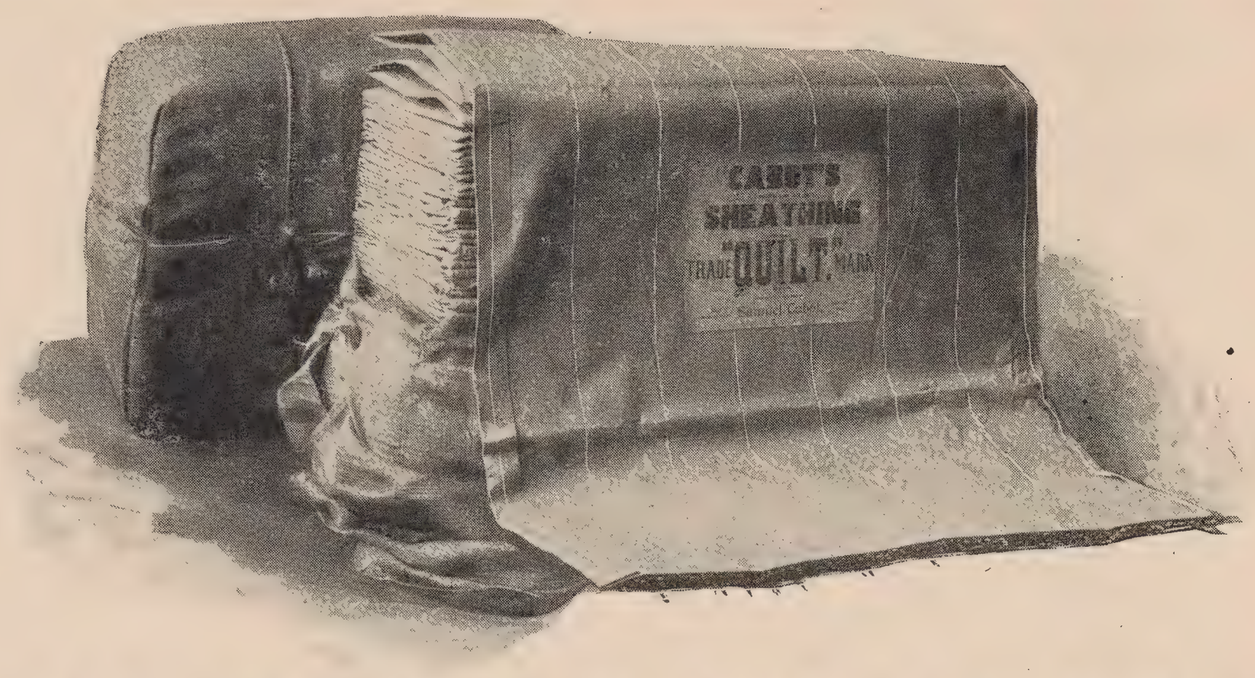

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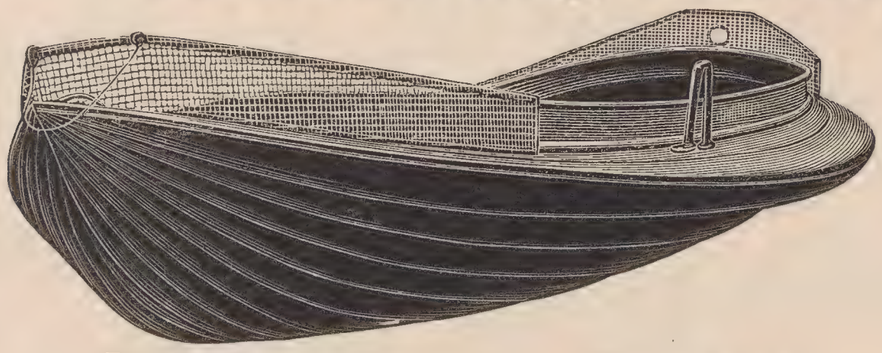

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The bill prays for a preliminary writ of injunction, to be continued during the pendency of the suit, and upon the final determination thereof to be made perpetual, and also demands an accounting and damages.

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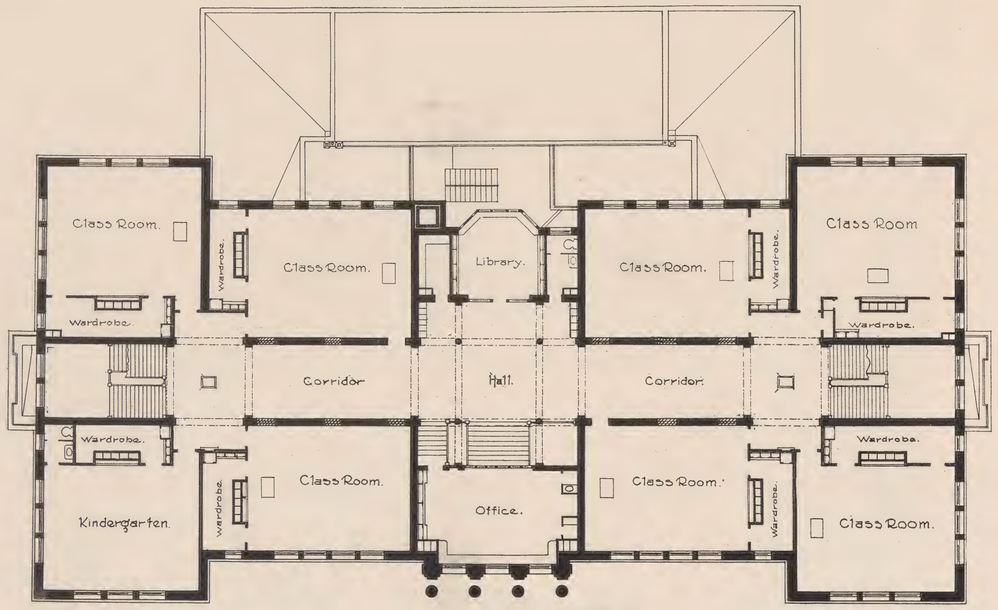

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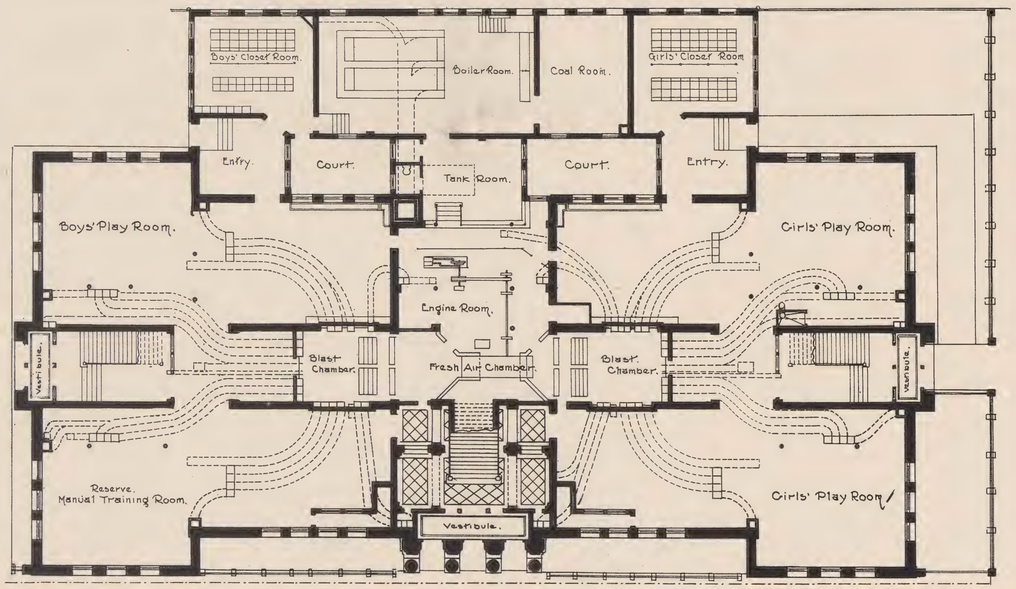

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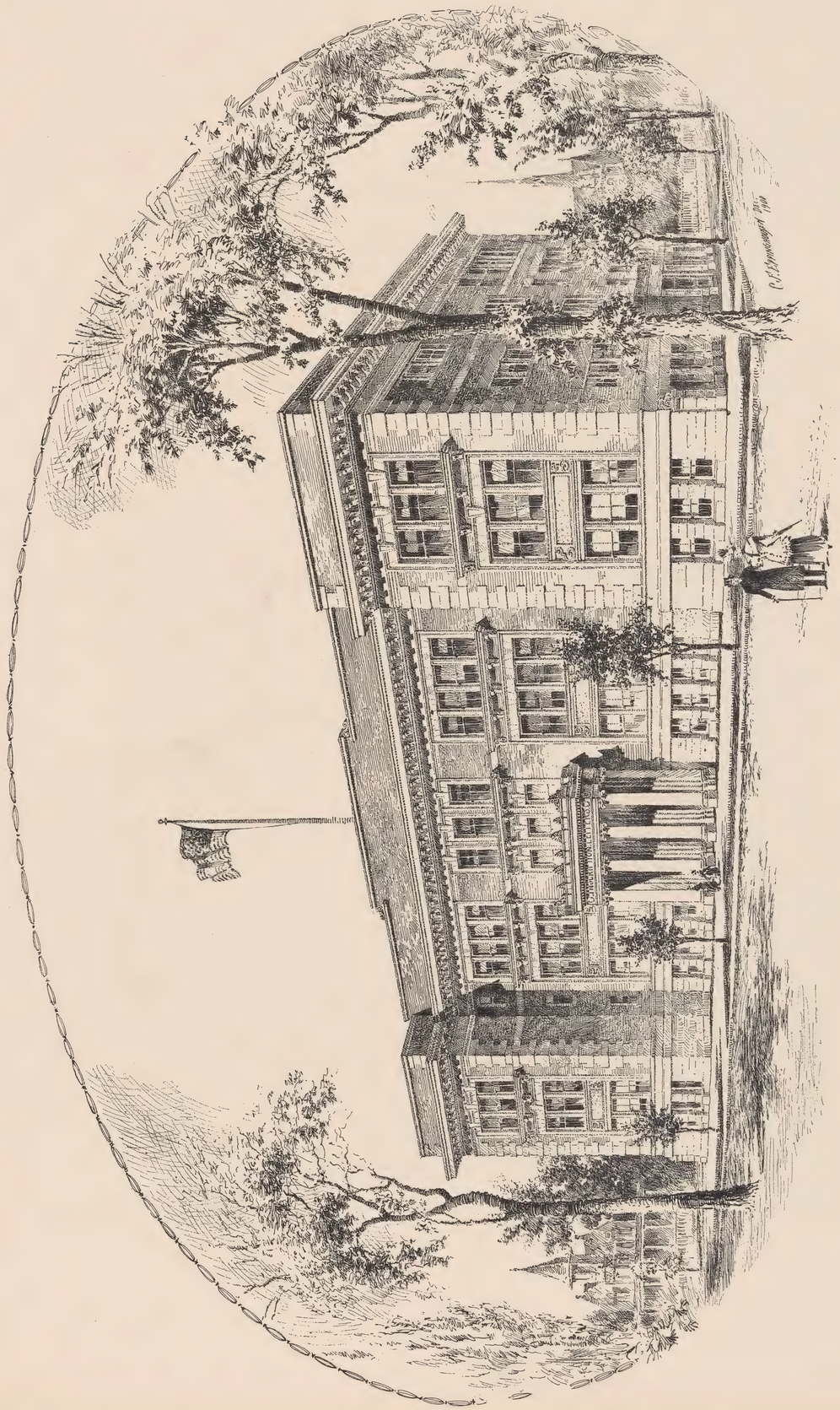

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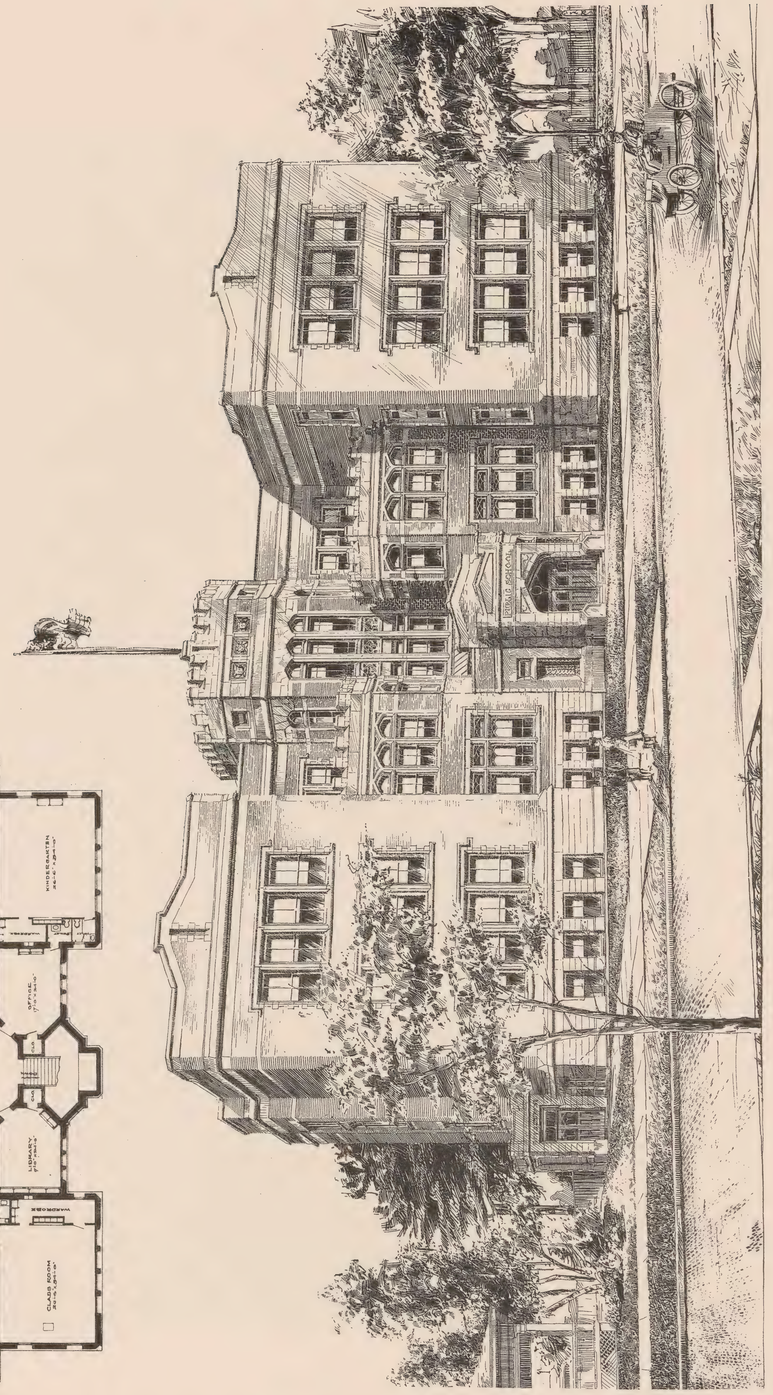

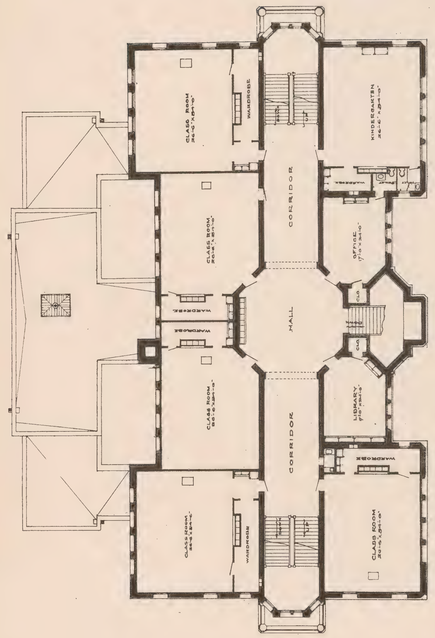

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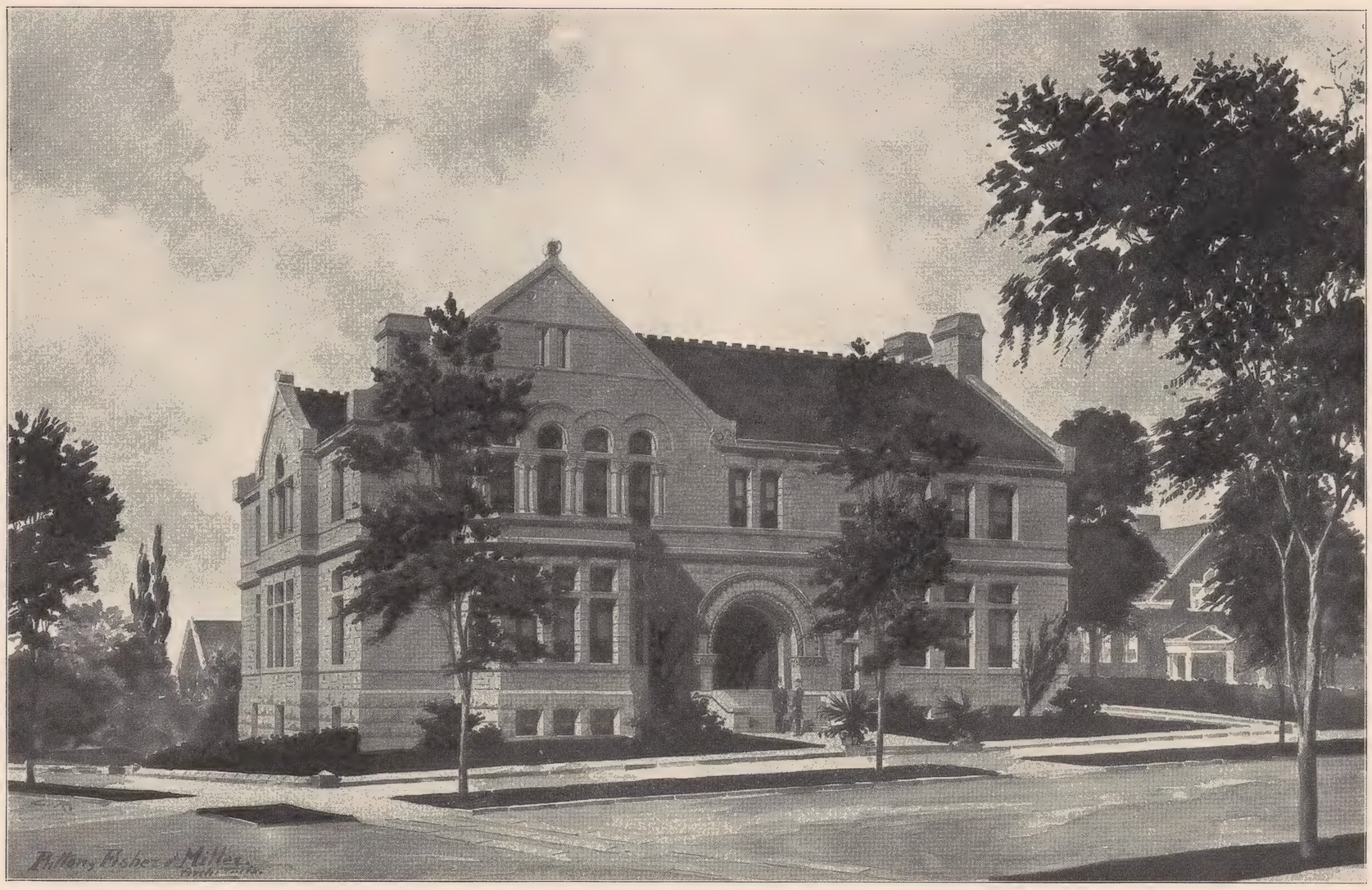

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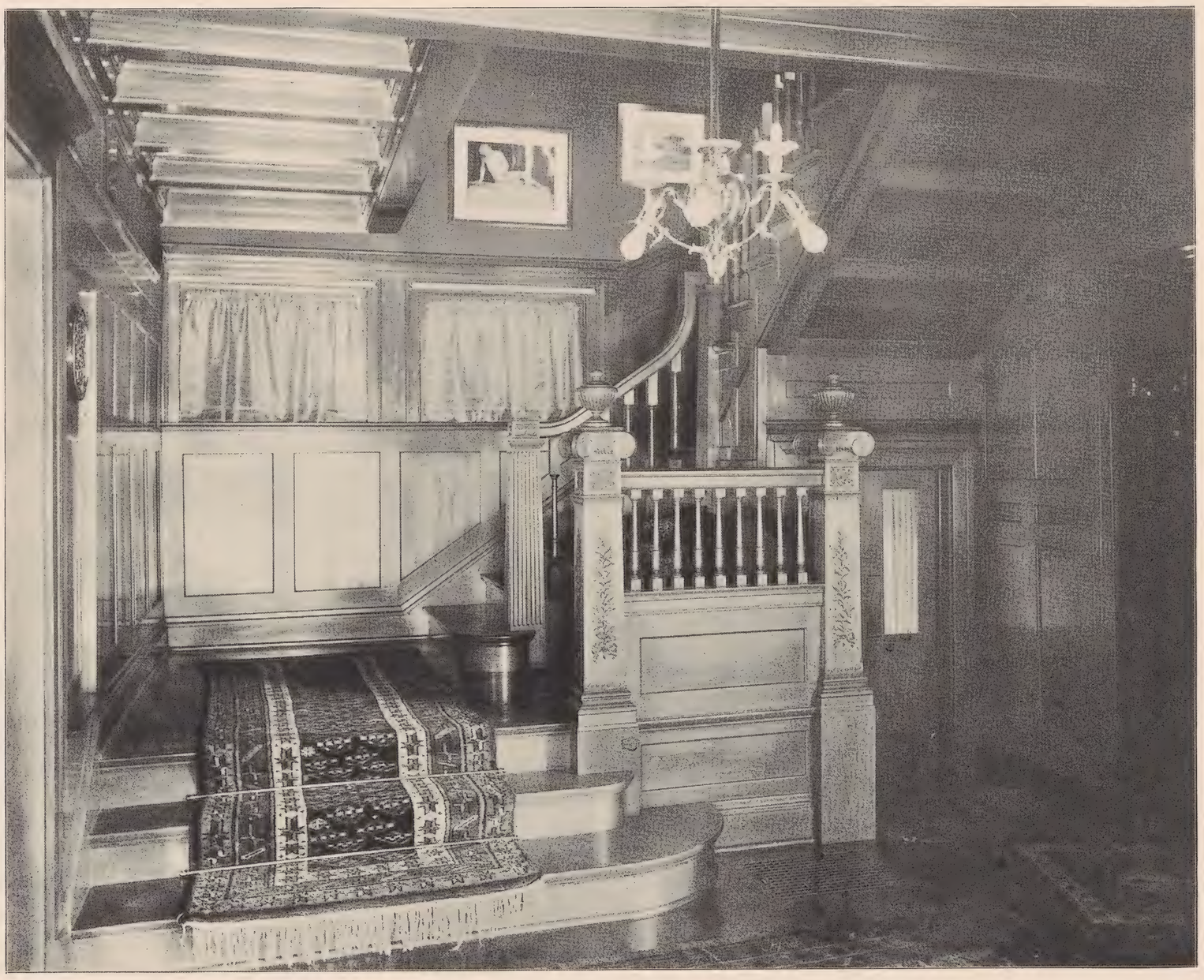

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Opening of the Pan-American Exposition.

On May 1, according to program, the Pan-American Exposition at Buffalo, New York, was opened to the public. While in design the buildings are in a high degree artistic, and the exhibits fittingly represent all American countries, the remarkable feature of this, the first exposition of the century, will be the electrical display and power furnished from Niagara Falls, which aggregates fifty thousand horse-power, generated by one plant and carried twenty miles by three three-phase systems of cables.

Architectural League of America Convention.

The third annual convention of the Architectural League of America which will be held at Philadelphia on May 23, 24, 25, will be an important period in architectural advancement in the United States. Although but the third year of the existence of this remarkable organization, its great activity has already made a most marked impression and in more than one direction. As the exponent of the thought and trend of all the architectural clubs, the work that it is doing is largely the outgrowth of club activity in the years previous to the organization of the national league. While its committees are engaged in the preparation of many movements along architectural lines, like that in support of organized municipal improvement, the present object is to secure to the rising generation of architects a foundation from which will spring an educational system that will train the student and develop his genius in the direction of pure design. Therefore the work which the league has in hand and which will dominate the coming convention is principally educational. Although imbued with the enthusiasm of youth, the aims and methods of the league are singularly sane and practical, and under continued intelligent direction is destined to be an ever-growing force in the field of architectural advancement.

Safety from Labor Disturbances Assured.

It may be that wisdom has come to the unions in the building trades, or it may with equal degree of truth be ascribed to the lessons taught during the past few years by the contractors and public, but it is evident that there is less probability of disturbance and a greater desire for harmony existing at present than before at this season of the year during the last decade. While it is not probable that the average workman realizes that upward of eighty per cent of the capital that his "striking attitude" has tied up or diverted into other channels is a dead loss to him in the shape of labor, the fact that all other lines of industry have been active for the past two years and he of the building trades only has been idle, seems to have made its impression, and as a consequence the arbitrary combination in Chicago was abolished by the retirement of the individual unions and such threatened strikes as that at Minneapolis was avoided by the casting out of the disturbing woodworkers. It may be that the unions will yet realize that in all work the workman is in partnership with the capital that projects and carries it on, and to him goes the larger amount of the proceeds as well as the largest loss when for any reason that capital is diverted. It is in any case certain that building operations can now be entered into with perfect safety to the investor as far as labor disturbances are concerned.

THE VIEW-POINT.

BY GEORGE W. MAHER, ARCHITECT.

EVERY community has its maxim or view-point. This vantage ground may neither be seen nor explained, and least of all assailed by debate. Argument may stir up a principle, but seldom radically changes a conviction. Nevertheless this conviction may be enlarged and ennobled by the exchange of wholesome ideas, and by contact with progressive life.

A community's or creator's point of view originates in the remote past. Finally when located it is a part of the surrounding life and activity, appearing again and again in various forms and grades of development in the natural progress of endeavor.

Who knows from whence came this original inspiration? It may be from contact with a great life, expressing activity, breadth and simplicity, or perchance from the sea, storm, a mountain or the vast plain, with its wonderful perspective and tremendous distances.

Nature has always been the great teacher. But the mind of man is subtle, free, and will not be dominated by any single force known. Thus they will not receive all their inspiration through specializing, nor from the profound study of natural objects, nor yet from science, nor little from photographs and books. But oftentimes from the still, small voice away from all, in the wilderness.

We have in our country a folk language and a folk song. It is poor, humble, and frail, yet constant. And if I mistake not, we have all felt its influence and know its meaning. Its substance of persuasion leads to directness of expression and toward truth, for the murmuring reaches us direct from local coloring and environment. Never can we be nearer to the real than from such a view-point. The French, Italian, Roman, Greek and Egyptian inspiration recedes from us in gradation dependent upon the laws of distance and remoteness of time. We view these monuments of the centuries arrayed in glorious perspective; a symphony of the past.

In order to faintly understand these creations of a great past, artificial means must be resorted to, formulæ invented and ultimately differences of opinion arise. Howbeit the universal opinion is that these monuments do not embody a tradition, nor do they express a life or environment foreign to their own. We bow to the spirit and principle there embodied, knowing full well that these will live forever. And great and enduring lessons can be profited by a broad and liberal acquaintance with the historic past.

But our view-point concerns us preëminently; our age, our environment, and our civilization, of this are we, or should be, living exponents. Is this civilization which surrounds us worthy of an architectural expression? Or is it contended that we have no national motive worthy to prompt us toward expressing a nobility in architectural form? Such a principle is not adjusted by a congress assembled, nor by dogma, but by the persuasion of the still, small voice, which is constant.

A unit in this complexity of environment, our part is to express that motive which appears to us clearest and easiest of comprehension. Have not some of our architectural methods been the reverse of this method? Has not architecture been taught bordering a great mystic power, practically unknown to the present world? And have not former precedent examples been duplicated exact for fear that we make the mistake of expressing our own individuality?

The motive power of our environment and our day is simplicity and strength. This may be contested, since its abuse is seen everywhere. Our facility to produce has had no parallel in the past. Today our own city is one vast workshop, fully equipped and powerful, equal to any endeavor. Yet with all, the character surrounding our daily life is one of simplicity and in striking contrast with that we call intuitively "foreign." Strength is dominant, and strength is ours.

History oft repeats in principle, and here is the parallel for us to consider. We find that Egypt in the age of simplicity and strength produced the pyramids. Greece and Athens in the age of simplicity and strength produced the Parthenon. Europe in the age of simplicity and strength produced the pier and the mighty romanesque arch. America? What will she do in her age of simplicity and strength? True we are in an age of opportunity where wealth wishes to dominate, but the vigor of a democracy is in its tenacity of purpose, and the vine-stalk will be more vigorous and the flower more pure and sweet for the constant struggle. Therefore are the beauty of simplicity and the beauty of strength alluring motives when recognized close at hand and akin to our own lives. For a familiar fragrance hath within its spell beauteous recollections of a reality, of country, of youth, and of home.

And this is the environment which appeals to all alike, and when all kindred arts will assist in the ennobling of our own native motives, then shall our own respective schools of art be distinct and individual. And this supreme effort of vindication will produce architecture by our own architects, sculpture by our own sculptors, painting by our own artists, and music by our own composers. Sculpture, painting and music, the accessions to a great art. A harmonious creation where symmetry and balance predominate and the accidents of a rude or artificial expression forever eliminated. Such is the ideal. For a perfect art must be a scientific art, molded by some symphony true from nature, blended by the loving touches of a palpitating human being, and thus endowed with the breath of life, expressive and responsive; a thing of everlasting beauty, and forever a joy.

There will arise in our midst at no distant day and in close proximity to our wondrous lake an effort architecturally, that will either be worthy or unworthy of our city and our generation. This small acreage of ground so close to the throbbing heart of a great metropolis seems to have been opportunely saved, in order that here might be expressed in appropriate and enduring materials a great energy and a great life. Florence of old responded to her maxim, her view-point, by creating the Strozzi Palace and the Vecchio. Venice responded by the creation of the Ducal Palace and the unrivaled San Marco. Shall Chicago produce buildings of a type expressive of her life, her times, and environment? Or shall it be said, and with truth, that her architects were not capable of an effort, worthy of the deeds and life, so close, so vital, and so true? Therefore do we argue that, however so humble, so seemingly unimportant, a life should be expressed, and in art, and as greater opportunities arise, those who are efficient should meet the occasion, awaken the dormant energy, and inspire it to action. For at heart every community must have a maxim, a view-point, and eagerly awaits the genius to properly interpret and idealize it.

Then here on our lake front is the opportunity and ripe. Needful only of the moving and guiding spirit to arouse the inert desires of the multitude, and then to clearly express in all simplicity and all strength that which positively appeals to all.

So that our pure inland waters will reflect not an artificial result, born of a far-clime, and of another life, but will reflect a reality born of a present life, made beauteous and harmonious by living artists; an inspiration for all time to come, a monument to purity and to truth.

PAINTS IN ARCHITECTURE.

PROBABLY few architects realize the expense incurred by property owners in paying men to do work that can be done by machinery. The mixing of paints with oil, driers and tinting colors is one of those things which nothing but machinery can accomplish satisfactorily; yet it seems to be accepted as a fact that hand-mixing is natural and acceptable.

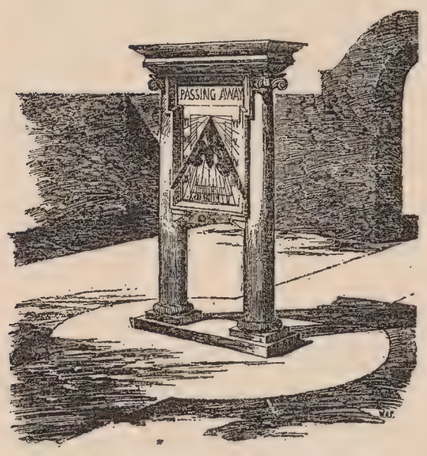
A man, by hand, simply can not produce uniform distribution either of oil or color through a mass of paint, and this means that he can not prepare uniformly wearing material. If he could his time would be too costly for the purpose.

The logical material and the only logical material is ready-mixed paint — that is ready-mixed paint containing legitimate paint materials, zinc white, white lead, inert pigments if required, pure linseed oil, turpentine (or benzine) and driers. Such paint, if unevenly mixed by hand may not yield the best obtainable results, but if ground together and mixed by machinery, they will surpass straight lead or any other hand-mixed paint it is possible to produce.

In such paint the zinc preserves the color, the oil absorption and durability; the lead obscuring capacity and ease of working; the oil the weather resisting elastic varnish, and the other ingredients, in the one case extension, in the other, drying qualities.

There are such paints on the market (there are more cheap mixtures of water and benzine, of course, but we can avoid them) and the wonder is that architects do not more frequently take advantage of their undoubted value and economy.

THE ARCHITECT AND THE GARDEN.*



A SUN-DIAL.

WHEN our late honorable secretary first asked me to read a paper before the Discussion Section, I told him that it was not possible for me to rise to the high level required, but, like the importunate widow, he refused to take "No" for an answer, and at last, weakly, I gave in.

If I thought it a difficult matter a year ago, much more have I found it so now, when so much has been said and written on the subject of gardens, and when there is at the present time a distinct and almost general revival of garden craft and design. I must, therefore, beg you not to expect anything new or original from me either in fact or theory. All I have endeavored to do is to again call fresh attention to the intimate relation between the house and the garden, and, therefore, consequently between the house designer, or architect, and the garden.

That these important relations are almost entirely overlooked or unknown by the general public is, I think, a truism which we all realize, but it seems to me more than possible that this ignorance is, perhaps, due to the architect himself, who has in the past failed to make use of opportunities which must present themselves to him when he is called in to design a new home, or, perhaps, to alter an old one. I mean architects generally as a body have failed to study garden craft and garden design, or to realize how great is the connection between house and garden from both the practical and æsthetic points of view.

The vast number of amateur (so-called) garden books, the several excellent architectural ones written within the last few years, and the more or less ready sale which they command are sufficient evidence of the awakening interest which is being aroused both in the public and professionally, in this, to me, most fascinating of all the allied branches of our art. It behooves us, therefore, to be on our guard, and to be fully prepared with reasons why the architect's jurisdiction should extend to the garden, and his knowledge founded upon sound principles.

I do not propose, therefore, to go much into the question of garden design, or what may be right or wrong in garden design. I would rather dare to paraphrase Rudyard Kipling's ballad, "In the Neolithic Age," and say, "There are nine and sixty ways of constructing garden lays, and every single one of them is right"—so long as we keep before us the spirit of the old English garden, and understand the principles which underlay its formation and development, and realize the reasons why an architect's education should include a study of garden craft. Perhaps here, at the outset, I had better say what I personally conceive those underlying principles to be.

First of all, then, I shall say *seclusion.* For if this was not the great aim of the old gardeners, it is an end which has certainly been attained; and it is at least interesting to find that the original meaning of the word garden in almost every language was "an enclosed space," and in the Greek word "kortos" a secondary meaning was a feeding-place. The brick wall with green crusted coping, the close-clipped hedge, defying prying eyes of the curious, high trellis-work, with its entwining creepers, all point to this end, and while serving the useful purpose of giving shelter to fruit and flower, wraps the whole garden with a tranquil air of seclusion, security and mystery. This was well understood in the seventeenth century, and is, I think, clearly the reason why Georgian houses were so often placed close to the road in order to give more space and seclusion to the gardens lying behind them.

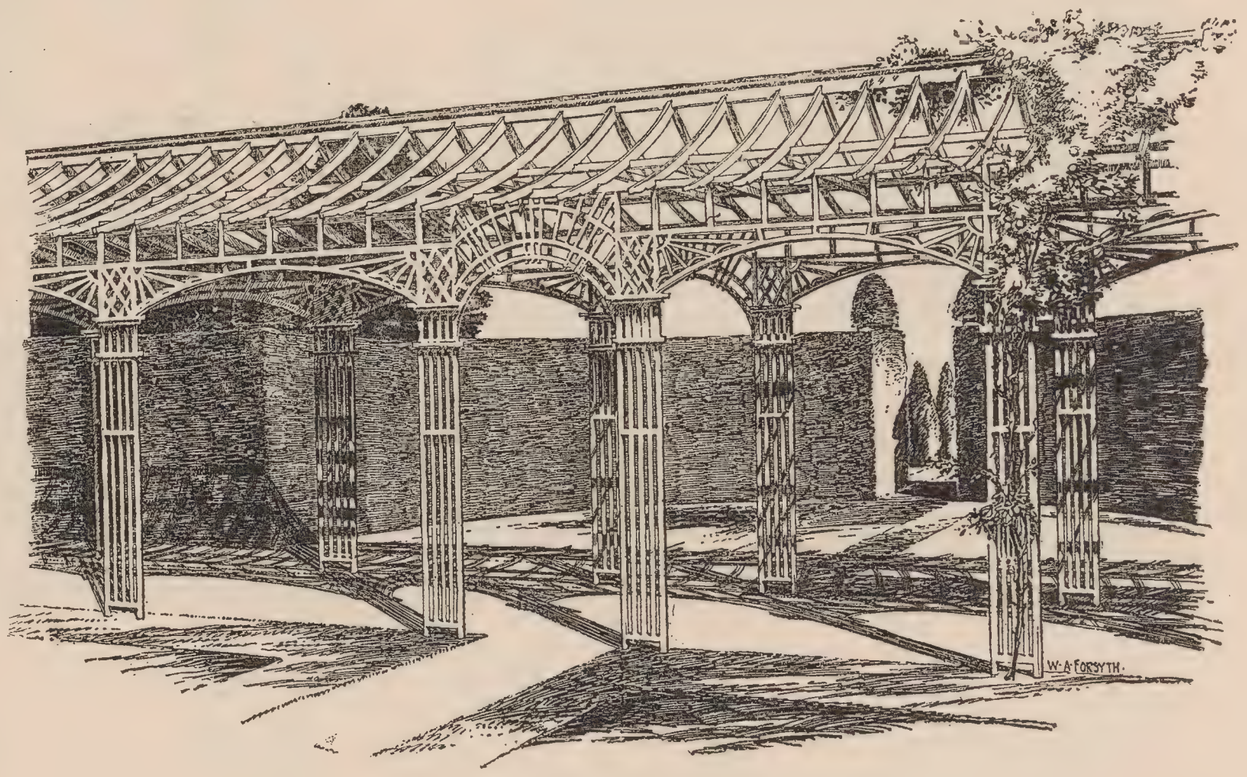
After seclusion comes *use.* Gardens were not made merely for pleasure, but to provide the home with necessities and delicacies elsewhere unattainable. Fruit growing was a fine art. The bakehouse, brewhouse, game larder, fishpond, dovecote, herb garden, walled fruit garden, orchard, quincuna and stillroom were necessities, and not merely evolved out of playful fancy.

For instance, there is, I think, no doubt that the fishpond or tank owed its origin in mediæval Catholic England to the demand for fish, and hence the development and charming treatment of these ponds in later times. The ladies of the household were experts in all that pertained to garden produce, and the recipes of our great-great-grandmothers would probably considerably astonish their twentieth-century descendants. The old-fashioned herb garden must not be forgotten. The culture and curing of "simples" was formerly part of a lady's education, and gardens were ofttimes renowned for this feature alone. Evelyn says: "We walked into a large garden esteemed for its furniture, one of the fairest, especially for simples and exotics." Then also the necessity for good, dry paths and terraces, for it was in the garden that exercise was "largely taken." Roads were few and bad, and ladies no doubt disliked mud as much then as now.

The garden was therefore an integral part of the home—indeed, an absolute necessity—for modern conditions were unknown, and if the household was not self-supporting it could barely exist. Thus garden and house grew up and were designed together, for each was the complement of the other. Thus, I think that the keynote may be said to have been necessity, to which was doubtless added a real love of beauty for its own sake, prompting those quaint fancies which help to enhance the charm and discount the utilitarianism which really lay at the root of all. Necessity and pleasure thus walked hand in hand, the former, by its "directfulness," giving the cue to the sturdy formality and strength of purpose which so appeals to us now. The natural result was a happy blending of pleasure and use until, by the simple process of evolution, the original uses were no longer required, and therefore not understood and misapplied, and the way then stood open for the chaos and futility of Capability Brown and his evil school.

Some slight consideration of the original cause of the development of the garden leads us clearly to the fact that the garden was necessary for the home life; that fruit, flowers, walks, turf bowling-greens, shelter and seclusion were the natural outcome of the household requirements, and so house and garden became wedded, as it were, into one, each dependent on the other, with logical purpose governing both. Each thus gaining from the close and living contact with the other, they finally became that perfect whole, which we can doubtless conjure up before our eyes. The gray stone or purple brick weather-beaten house, the trim, well-kept walks, the velvet turf, the checkered play of light and shade on grass, yew and gravel. The quaint old-world flowers, coming and going again and again, year after year, in their old familiar places beside the stained and lichened wall, with its kindly shelter from the northern winds. The sun-dial with its happy phrase, perhaps some little sunken garden, secluded and more sacred than the rest, with the flash of its cool fountain. Last, but by no means least, the generous fruit garden and orchard, delighting equally in sight and taste. But no words of mine can adequately describe the limitless possibilities which are to be found. The result we know, that happy blending of house and garden, which is the outcome, not merely of chance and time, but of steadfast purpose and well-trained organized design, born in the days when gardening was a loving craft worthy to be followed, loved and understood by the noblest minds.

In effect, then, these three—seclusion, usefulness and pleasure, are what I conceive to be the principles underlying the old tradition and examples.



A TRELLIS PERGOLA.

The question we must next ask ourselves is this—Do these principles still hold good; are the same necessities still in existence; can we after making all due allowance for the lapse of centuries and rapid growth of modern requirements, still say that the same factors should form the basis of good garden design in this twentieth century, and, if so, how is the architect thereby affected? At first sight it may appear that as the old order changeth, giving place to new, so we must search for new essentials upon which to found the lines of a logically designed modern garden; but a little consideration will, I think, show that in reality almost all the old conditions should apply at the present time.

First, *seclusion.* I should say that in these days of publicity, of interviewers, photographers, cheap magazines, and general social scramble, never was the quiet calm of the garden more desirable. The greater number of houses, and the greater chances of being overlooked by near neighbors, serve to make strongly defined boundaries, which will act as screens, even more imperative than ever, and thus we have ample excuse for "high-walled gardens green and old," hedges thick and trim, and well-designed trellis as bounding lines.

Of the usefulness and necessity of a garden the need is still the same, though perhaps at first sight not so apparent, and the reasons are more psychological than materialistic.

Different kinds of fruit and vegetables can probably be bought

*A paper by Mr. H. P. G. Maule, read before the Discussion Section of the Architectural Association on the 13th ult., and reprinted from the *Builder* of April 12, 1901.

from the greengrocer as cheaply as they can be produced in most private gardens, certainly near London, but the demand for them is greater than ever. Jam and pickle factories have done away with the absolute necessity for home growing, but I think everyone will agree that home-made jams are far superior. I am sure that few people realize how much can be done and how much pleasure obtained from even a limited number of well-cared-for fruit trees, and what is more beautiful than an apple or pear orchard either in early summer or autumn? Then, too, there are many trees such as mulberry, quince, medlar, cherry, plum, filbert, which are full of delight to the eye, and useful as well, which, planted with discernment, will give pleasure to generations. Although sociology hardly comes within the scope of this paper, and without going quite as far as Voltaire's "Candide" and saying: "Let us cultivate our garden, for that comprises the whole duty of man," I am certain that if nowadays gardening, not merely flower gardening, but honest fruit and vegetable growing with the accompanying culinary knowledge, was better understood and followed, as our forefathers followed it, the modern cry of broken nerves and jaded energies would not be so much in evidence, both for men and women — and the everlasting cry for amusement and excitement might somewhat abate. There is no recreation more healthful than gardening, and health is the ground plan of all that is worth having in life.

There is one other point I must touch upon in connection with the necessity of the garden, and that is, its educational influence, especially upon children. In these days, when so many time-honored fallacies have had to succumb to modern science, there is no better way of teaching scientific truths and imparting a true system of observation of nature than by means of the well-ordered garden. Of the joy of the "pleasure garden" there can be no doubt. Bowling greens have given place to tennis and croquet lawns, but that is only in the course of the natural evolution of physical recreation, which has become more imperative and vigorous. The love and desire for sweet-smelling, beautiful flowers and dry walks — indeed, all the pleasing fancies of the old gardens are strong as ever, and, surely, we moderns of the twentieth century, with all our increased knowledge and vaunted cultivation, should be able to appreciate the pleasure part of the garden, and derive moral and physical good from it as much as our ancestors. Without wearying you further then, it is my belief that after making allowance for the gradual evolution of certain old forms such as bowling greens, to modern ones, such as tennis lawns, speaking broadly, all the old essentials are still in existence. If some are in modified forms, and if some have dropped out, others have made their appearance, and, therefore, the same factors or their modified or more highly specialized descendants still govern garden design. The house and garden still require each other to make the home one perfect whole. Each must fit in with the other, and each must be in most cases subject to some special circumstance of site and locality.

Who, then, is so fitted to bring this about as the man who designs the house? He it is who must have a hand in the laying out of the garden, or, as I hope to show, points may be missed, and full advantage of the site may be lost, and so the chance of welding together house and garden through some happy accident of nature may be missed forever. How, then, can we convince our clients that one mind should control the two? The end can only be achieved by taking our client (or more often his wife) with us. He probably has no conception that we look upon the garden as our province, and care must be exercised in approaching the subject. If he is a careful man, or anxious of expense, it may be well to approach the garden from the materialistic point of view. Point out the desirability of determining where surplus earth may be removed at one hauling, and thus save labor, and form your broad lines all at once. The making of paths from old material may be suggested, or the position of the carriage drive if the house is to have one. If by some such means the ice can be broken and the rude shock got over

FORMAL GARDEN SEEN FROM COLONNADED VESTIBULE.

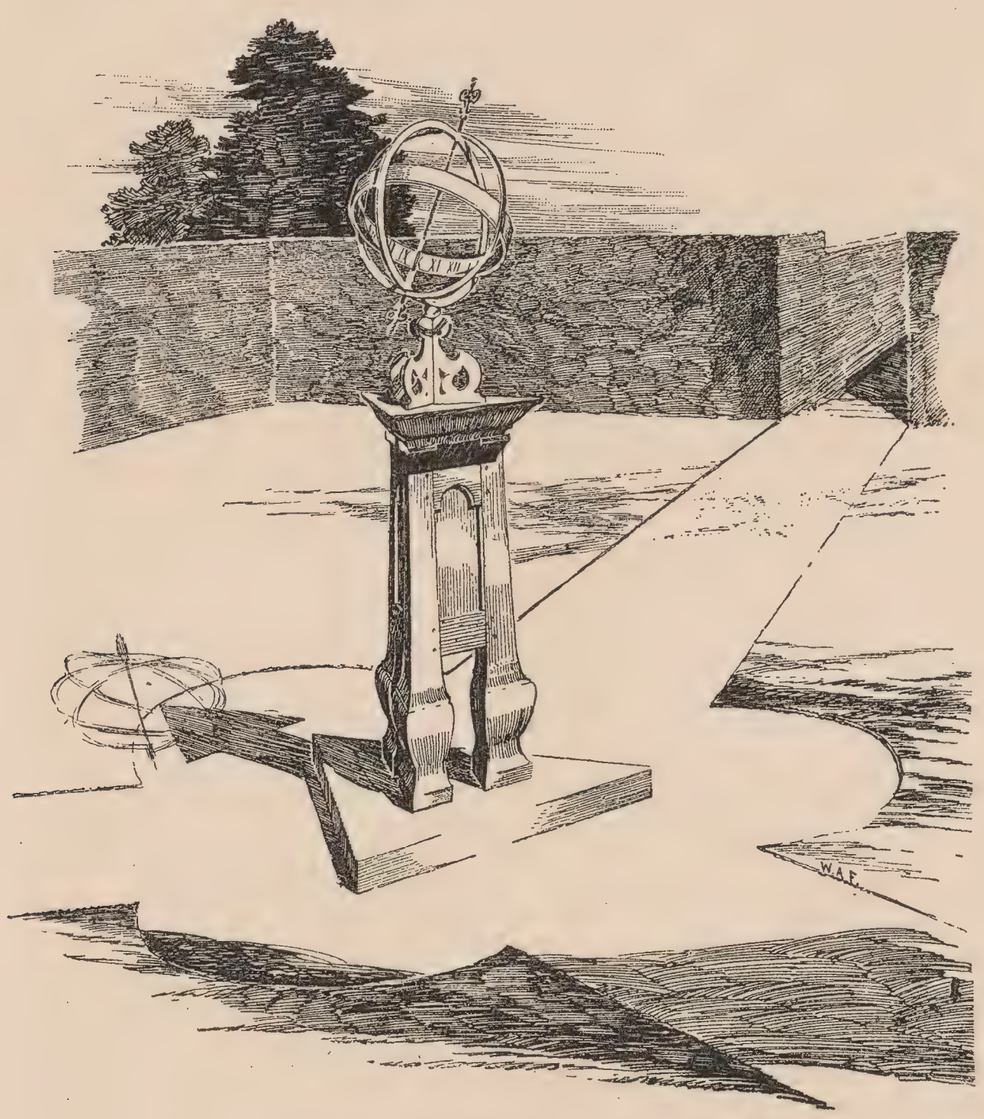
of finding that the architect wants to have some hand in the external surroundings of the house, then, perhaps, the rest may be plain sailing, and if the man or woman has any real love of the garden, out it will come, and the resulting garden should express not so much your individuality as in the house, but the owner's, directed by a trained mind, but still expressing, and that, too, decidedly, the owner's particular quips and cranks.

If, however, he is still untouched by the revival, and is a "wobbly-walk" man, then indeed our labors are hard, but it is well to remember that mostly these men are such from want of knowing better, and a little tact and an *apparently* unstudied introduction to "The Formal Garden in England," may work wonders, and all may be well in the end. Most people are open to argument, and the arguments in favor of formal lines and well-defined boundaries are so well known that no more than a passing reference is needed here. Moreover, the back of the old opposition is broken, and the architect will chiefly have to make good his claim to the right to settle the main lines of the garden scheme.

Before, however, he can scheme anything there are certain facts he must know. First of all comes the question of garden labor. He must ascertain exactly what amount of labor will be kept, for upon this hangs in reality the whole scheme. It is suicidal to design a garden which requires the time of four men to keep it in proper order if only two are to be kept, and the evil has two results. First, your garden will never look well, it will be untidy; and secondly, the owner will never feel satisfied, and will either be compelled to employ more labor than he can well afford, or else put up with the evil of an understaffed garden.

In either case he will blame the designer, who assumed a responsibility without due knowledge.

The chief charm of a real garden is, I think, shown in the care which is taken of it. If the turf verges are shaggy and ill-kept, the charm of line is gone, and the feeling of love and care which should be induced will be wanting. I know a garden, and I say garden advisedly, which is only some 16 feet by 20 feet, and yet year in and year out it is the pride of a village, and that solely by reason of the love and care bestowed on it by its cottage owner. I know also gardens which are gardens in name



A SUN-DIAL: DESIGNED BY A. N. PRENTICE.

only, because they are too ambitious for the staff, and therefore paths become weedy and turf gets dull for want of sufficient attention. These may sound great platitudes, and be well known, but it is so easy to draw on plans gravel walks, grass borders and sunken lawns, forgetting all the while that walks want constant attention, and that grass borders and slopes especially require plenty of labor in summer if their true value is to be obtained. Grass particularly only looks its best when it is incessantly rolled and mown, and rolling and mowing, I know from practical experience, take time, even for a small quantity. Therefore, above all else, first find out how much labor will be kept and cut your garden accordingly. Some excellent practical advice on the subject of garden labor is given in Mr. Mawson's "Art and Craft of Garden Making," but the best way of arriving at a reasonable judgment is to carry in our minds some garden or gardens we know well and the number of men who are employed, comparing the results obtained with the size of the garden and using our knowledge when designing.

Having discussed preliminaries and discovered the trend of our client's garden mind — if, fortunately, he has one — the choice of the actual position and aspect of the house will largely depend upon the result arrived at, especially, perhaps, if the site is a hilly one. For instance, we might choose a level site for a lawn to avoid expense in moving earth, and the position thus chosen might affect the house considerably, for often it is far better to take old meadow turf in hand, to work, roll and mow it, in fact, rather than to sow afresh, especially where time is an object and where a newly turfed or sown lawn would be a considerable drawback to the early enjoyment of the garden. For turfing and sowing can only be done at certain seasons, namely, spring and autumn, and then the result depends largely upon weather, which is chance. Nothing so makes or mars the appearance of a garden as good or bad turf.

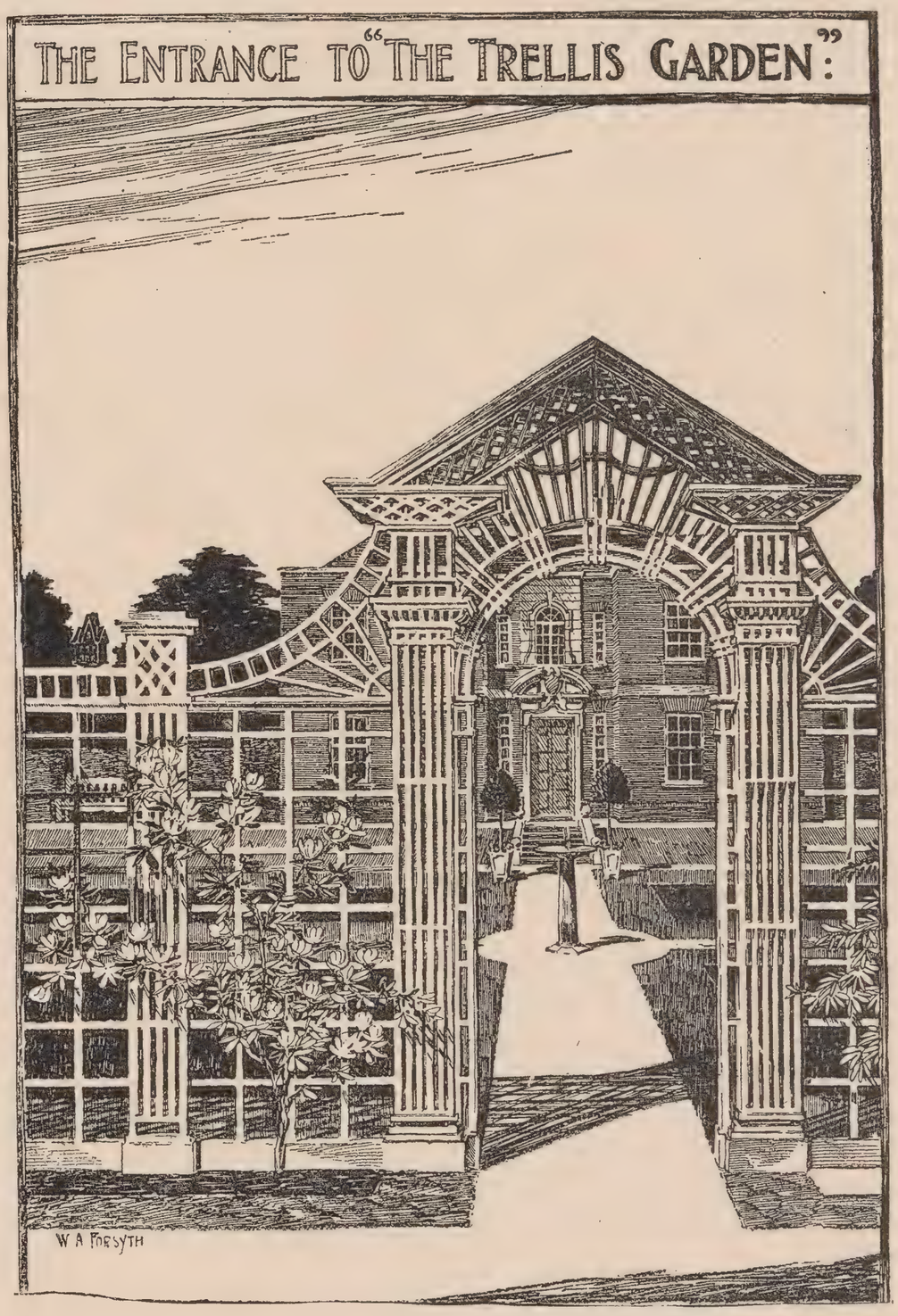
A fall in the ground or an old hedgerow may be utilized for a terrace, but it is not necessary to enumerate all the possibilities. Generally some characteristic of the country side or natural feature on the site which may lend itself to our gain can be seized upon, and which may influence or modify both house and garden, proving how essential it is that the architect should have the necessary knowledge to turn the accidental peculiarities of the site to the best advantage. If he merely settles the aspect and plants the house down upon the site without thought of the garden, it seems to me obvious that chances will again and again be missed of making some special point or feature which will stamp the future home with an individuality all its own.

Surely, then, each site must be treated on its own merits before the house is built, and it needs no imagination to see that to do this properly, house and garden must be considered together and at the same time.

It must not be forgotten that in almost all gardens there is a chance and opportunity — indeed, a necessity — for some architectural features which it is essential the architect should design or control. It is here that the modern garden designer and horticulturist necessarily fails. He has not had, in most cases, the requisite architectural training, and not having designed the house, he perforce loses that sympathetic link in detail which the architect would impart, and thereby still further blend in harmony house and garden. The old gardens were full of architecture, and such buildings as toolhouses, potting-sheds, roothouses, stone steps and balustrades, summerhouses, dovecotes, seats and thoughtful trellis work — features in them — are required still, and if used with restraint will help to add human interest. But here again the necessity for them should be the keynote. Do not let us introduce them simply to make "features." If a seat is desired it will work its way into the design, and by its presence add to the garden's beauty. The sun-dial, though apparently no longer a necessity (in these Grimthorpian days), is most fascinating, and if used rightly will set our thoughts working and lend just that touch of romance which is needful to both eye and memory. Above all, let us keep garden architecture simple both in form and feeling. It is not what we put in so much as what is left out that sets the seal on the perfect garden, and this is a point I particularly want to emphasize. The old formal garden had almost degenerated into grotesqueness by the eighteenth century from over-elaboration. Bacon's advice, "Be not too busy or full of worke," had been forgotten. Let us keep this and Sedding's maxim, "All is fine that is fit," well in mind, and see that we fall not into the like mistake.

Thus far I have dwelt only with the main principles upon which I conceive garden design was founded in the past, their application to modern conditions, and some reasons why the architect should be a garden designer. The architect's knowledge, however, must extend further than this. He must have a knowledge of garden craft. He must know and love the materials he has to design with — namely, the flowers, grass, trees and herbs. He must have an eye to the fall and lay of land, and the differences of soil and aspect, and be fully alive to the fact that a garden is a living, growing thing, pulsating with life, and not the outcome of a geometric paper design made by a man who knows naught of his materials.

THE ENTRANCE TO "THE TRELLIS GARDEN":



So much has been said lately about gardens from the practical point of view (and I would especially call to your attention a paper by Mr. Mawson, read before the Birmingham Association, which appeared in the *Builder* for January 19 this year) that I know I could only cover the same ground, and in a far less able manner; but some points may be mentioned as being typical and also as essential for us to know. I will mention them briefly, only saying that experience and constant inquiry whenever opportunities occur are the best means of gaining that practical knowledge

which it is absolutely necessary for us to have if we are to cope successfully with garden design.

First, then, soils and drainage. Obviously the latter depends upon the former, and until considerable practice has given us knowledge I would suggest that we first of all ascertain what is the local custom as to treating the soil, and how much or how little drainage is required. Mr. Mawson says that "unprepared soil is the cause of almost all garden failures."

Secondly, we must discover what grows well in the neighborhood, for it is no use designing and planting trees or boundaries which will not grow successfully in the locality, necessitating planting being done again after some years and at a time when some considerable show and growth should have been the result of our efforts.

Thirdly, botanical or horticultural knowledge. I do not think it necessary for us to go very deeply into this question, but what we must do is to know something of the times and seasons at which the flowers we propose to use will make their richest appearance. We need not know the best way to make them grow, but may presume that will be done for us. Observation and a garden notebook will teach us much.

Good, well-made, dry paths and walks are a practical necessity, for wheeling soon cuts them up unless the foundations have been well prepared. Fruit and flower gardens must have sun and must have shelter, or plants will not grow, and early and late frosts will do a vast deal of unnecessary damage.

The house-drainage scheme must not be overlooked, and advantage should be taken of all manurial products.

In effect, then, the burden of my paper is this: house and garden must not be severed, but must be treated together, and be the product of one mind — the architect's. He may scheme his garden as he pleases so long as it is subordinated to the house, and he always keeps before him its fundamental uses and objects — seclusion, usefulness and pleasure.

Thus I have endeavored to link architect and garden together, and the knowledge he will have to make his own will be the most satisfying and delightful of all his education. If in building materials we are brought in contact with nature that is dead and gone, in the garden we are face to face with living Nature herself, and the more we know of her the more we shall love her "myriad ways."

I have now but to ask you to "piece out the imperfections with your thoughts," and to make yours the ideal I have tried to keep before my own eyes —

> "A garden bower'd close
> With plaited alleys of the trailing rose,
> Long alleys falling down to twilight grots,
> Or opening upon level plots
> Of crowned lilies, standing near
> Purple-spiked lavender:
> Whither in after life retired
> From brawling storms,
> From weary wind,
> With youthful fancy reinspired,
> We may hold converse with all forms
> Of the many-sided mind,
> And those whom passion hath not blinded,
> Subtle-thoughted, myriad-minded."

THE ARCHITECTURAL LEAGUE OF AMERICA CONVENTION.

PRELIMINARY to the third annual convention of the Architectural League of America, to be held at Philadelphia on May 23, 24 and 25, the following program has been issued by the T-Square Club, of that city, in whose hands the general direction of the convention is placed:

FIRST DAY, MAY 23, IN THE GALLERIES OF THE ART CLUB.

9 A.M.— Registration of delegates, etc.

11 A.M.— First session of the convention.

3 P.M.—Take special steamer to Newcastle, Delaware, where the old colonial architecture of the place will be inspected and the whipping post and pillory, still in occasional use, will be viewed. Supper will be served on board in the evening, while returning to the city. Possibly other stops may be made.

SECOND DAY, MAY 24, AT THE UNIVERSITY OF PENNSYLVANIA.

10 A.M. to 1 P.M.— Business session in Houston Hall.

1 to 3:30 P.M.— Luncheon and reception by the provost, trustees and faculty in the Museum of Archæology.

3:30 P.M.—Business session in Houston Hall.

8:30 P.M.—An entertainment will be given at the rooms of the T-Square Club.

THIRD DAY, MAY 25, IN THE GALLERIES OF THE ART CLUB.

10 A.M. to 1 P.M.— Morning session.

2:30 P.M.—Afternoon session for unfinished business, etc.

7:30 P.M.— Banquet at Horticultural Hall.

The T-Square Club will be most happy to welcome its friends in Philadelphia during the third convention of the Architectural League of America, to be held May 23 to 25, inclusive.

Attention is called to the excellent opportunity for visiting Philadelphia and its many points of historic interest and natural beauty during the best season of the year.

Visitors may advantageously combine trips to the Pan-American Exposition and to this convention.

The Hotel Walton, Broad and Locust streets, has been selected as visitors' headquarters, special accommodations, at reduced rates, being held in reserve.

Arrangements are being perfected by which a somewhat reduced rate of fare may be obtained and also the opportunity for all visitors from Detroit, Chicago, St. Louis and Milwaukee to return by way of Buffalo and visit the Pan-American Exposition. This would seem a most desirable plan, and as the Grand Trunk and Lehigh Valley Railways present the best service and quickest time via Buffalo, this route is chosen. Besides the advantage of seeing the Pan-American Exposition without inconvenience, the Lehigh Valley Route from Buffalo to Philadelphia is one of the most picturesque in the country, all of which is passed over by daylight. Returning, the highlands of southern Ontario are passed in daylight on the Grand Trunk. Altogether the trip promises to be most enjoyable and it is expected that a large number of visitors besides the delegates will attend the convention from the West. Corresponding Secretary Emil Lorch, the Art Institute, Chicago, will give particulars in regard to time-tables and the visit to the Pan-American Exposition.

A NEW TYPE OF CHURCH ARCHITECTURE.

THE Second Church of Christ, Scientist, Chicago, S. S. Beman, architect, as shown by the three photogravure illustrations in this number, represents a type of architecture which is a radical departure from anything orthodox in the way of church building. The structure in almost every detail is the opposite of the usual church architecture.

On approaching the building, on Wrightwood avenue, a person would be impressed by the general features of the reposeful architecture, and then interested by the harmony with which each detail is treated. The stone used is what is known as Bedford or Indiana oölitic limestone. It was carefully matched at the quarry by Messrs. Thomlinson, Bradbury, Riley & Co., who did the cutting and setting. They also own the quarry and selected each stone for its particular shade and succeeded in getting a uniformity of color that is seldom attained. The steps at the main entrance are of Quincy granite, furnished by the same firm.

Although built over a bed of quicksand, the foundations reach to hardpan, and are so firmly imbedded that there is not the least possible danger of settling. The foundation contractors, Messrs. Ralph & Sumner Sollitt, also laid the foundations under the Methodist Book building, on Washington street, where the problem of foundations was so difficult. The steel construction of the building was done by C. L. Strobel, the engineer, who contracted for the work himself and had it put up under his personal supervision. In this as in every contract for the building, it appears to have been the policy of the management to get the best that could be obtained, and the *esprit de corps* seems to have prevailed among the contractors as well as the congregation and architect.

On entering the building, one finds a large vestibule reaching along the entire front, from which broad stairs lead up to the auditorium. The vestibule is wainscoted its entire length with English veined marble, pierced in the rear wall with large mirrors and doors leading into cloakrooms, sitting-rooms, etc. The floor of the vestibule as well as the auditorium is laid in Roman mosaic, over four thousand feet in all. The selection of the marble in the vestibule is worthy of especial mention. It begins at the entrance by being a very distinct pattern of the English vein variety, and gradually begins to fade away as one ascends the stone steps to the auditorium. Following the marble base around from each stairway to the platform, the pattern becomes more and more indistinct, until the platform and reading desk are reached, where the marble is pure white Italian. The effect is charming. The work was done by Sherman & Flavin. The prevailing color of the auditorium is between a lemon and a light canary, and the treatment of the windows by Louis J. Millet, in the same subdued tone, adds to the general effect. Especially is it emphasized by the highly polished dark tone of quarter-sawed oak opera chairs, upholstered in brown leather, which fill the auditorium. The chairs are supplied by the Thomas Kane Company and are known as their No. 103, quartered oak, electro-plated standard, and are provided with comfortable arm rests, hat racks, foot rests and book racks.

The principal light, at night as well as day, is obtained from the large center dome, around which runs a belt of incandescent lights, augmented by three immense arches of incandescent lights following the arches of the ceiling, which collectively number nearly seven hundred lights, each of 16-candle-power. The system is what is known as the "three-wire, two distributing system," and requires a voltage of 110 volts, with complete conduits and all outlet boxes of iron. The wiring and installation was done by Messrs. Cuthbert and Black.

The structure covers an area of 120 by 110 feet, and will seat fifteen hundred people. It is heated by the low-pressure system of direct radiation, from a pit underneath the center of the auditorium. The building complete cost $80,000.

NEW PUBLICATIONS.

LIBRARY CONSTRUCTION ARCHITECTURE, FITTINGS AND FURNITURE. By F. J. Burgoyne. New York: Francis P. Harper; London: George Allen. 1898.

This work, although bearing an American imprint, is an English publication, but the information contained applies to all library buildings. It commences by giving a description of the old library buildings, and details thereof. It speaks of the growth and extension of such buildings and that room for such growth should be provided for in the designing of such buildings. It specially recommends a site which is detached on all sides. It gives various plans of buildings, both European and American. Indeed it has two chapters describing American library buildings, including a description of the Newberry Library at Chicago. It gives descriptions of furniture, fixtures, lighting and ventilation, which it would be well to quote if it were not that it would be necessary to quote almost the whole book in order to embrace all the items desirable to be known, and we therefore must refer to the book itself.

There is one point that may be new to some of our readers. On page 15 it is said: "The decoration of the interiors of libra-

ries should in all cases be severely simple, and kept subordinate. It should always be remembered that the use and storage of books is the *raison d'etre* of the building, and that if the public rooms are so ornamented and decorated as to become show places for sightseers, the readers will be disturbed, and the proper use of the library will suffer. The beauty of the Boston Public Library attracts numbers of visitors daily, who audibly express their admiration or criticism, and careful reading under such conditions is impossible. It is a pity that the mistake should have been made of attempting to so beautify this noble building that it shall be regarded by the average man rather in the light of an art gallery than a place for literary work and study."

Again it is said, on page 257: "The noble examples of decorative art which have been obtained for Boston, while most creditable to the æsthetic taste of the inhabitants, make the public rooms art galleries instead of places for study. The two objects are quite incompatible; each is excellent, but they brook no rivalry, and the crowds who gather to inspect the decorations are a nuisance to the student, who wishes for quiet." We can commend the book to any one interested in the subject of library buildings.

MOSAICS.

REYNOLDS FISHER, of the firm of Patton, Fisher & Miller, architects, Chicago, has given up the practice of architecture and has settled in business in Seattle. He is the vice-president and treasurer of the Pontiac Brick & Tile Company, of which his brother, W. W. Fisher, is the president. The architectural firm will be continued by the remaining partners, Normand S. Patton and Grant C. Miller, under the title of Patton & Miller.

THE international competition for the university of California, at Berkeley, which marked an architectural epoch in America, has taken a definite step. In order to carry out the execution of such an extensive and important work, covering so long a period of time, a perpetual board of advisers has been appointed, composed of the following well-known architects: D. Despradelle, of Boston, and Charles F. McKim, John M. Carrere and John Galen Howard, of New York.

WITHIN thirty days ground will be broken for a new hotel at French Lick, Indiana, to cost between $350,000 and $400,000. The structure will be completed by November 1. The syndicate which is engaged in the enterprise was organized through the instrumentality of the management of the Monon Road, and is headed by Mayor Thomas Taggart of Indianapolis. President McDoel stated recently that the Monon would abandon its present depots at French Lick and West Baden when the new hotel is completed and will erect a union depot to be used by the patrons of both resorts.

THE wisdom of the average farmer, who thinks he is robbed if taxed a dollar for the improvement of his roads, has been effective in the Michigan and Wisconsin State Legislatures, where bills to license architects have been killed because, "if it became a law, a farmer, if he wanted to build a hencoop, would be obliged to employ an architect and pay him enough to build a barn." Illinois has proved that though such legislators can not be educated, they can be won by self-interest, and the profession and the enlightened people who see the menace to public safety and general enlightenment the absence of such a law perpetuates, can only succeed by continually presenting the matter and keeping the necessity for such a law before the people.

IN response to a petition made by French and Belgian architects and artists, it is announced that the authorities of Tournai, in Belgium, will tear down the blocks of houses which for several centuries have so crowded the noble Cathedral of Tournai that it is almost impossible to get a good view of it from any side. The cathedral, which is known to all travelers and artists, dates from about 1200; the Gothic choir was finished in 1338. Inside there are remarkable sculptures by Flemish artists and glass-workers dating from 1456. During the latter part of the Middle Ages the townspeople were allowed to build their houses not only close to the cathedral, but right up against its walls. The present clearing is to be a radical one, leaving a space of 100 feet upon all sides, and involving the destruction of more than fifty houses dating back as far as 1500.

INDIANS BUILD A RAILROAD.— Out in Wyoming the Burlington railroad is building a line down into the Big Horn Basin country, and the contractors succeeded in interesting a lot of Crow and Sioux Indians from the reservation near by, and engaged a number of them on the grade. At first they were lined up each with a scraper and a team of horses and at the word, with a yell, they started to race, that being the sport dearest to the Indian heart. But after the "boss" got them in line again, and explained that they were there to "move dirt," and not to race horses, things went more smoothly, and most of the bucks have developed into good workmen. And so it happens, that within a few miles of the battlefield where Custer and his brave men of the 7th Cavalry made their last stand in 1876, these warriors, and sons of warriors, many of whom no doubt took part in the massacre, are peacefully taking up the white man's burden and "make 'em heap sweat."

THE recent archæological discoveries near the island of Cerigo, the southernmost of the Ionian Islands at the southern extremity of Morea, have aroused the most intense interest among archæologists and students of classical art. D. Caclamanos, the Greek archæologist, states that toward the end of last year divers, who explored the bottom of the sea between the islands of Cerigo and Cerigotto, found wreckage of a number of ancient ships and among them fragments of marble and bronze statues of exquisite workmanship and beauty of form. The Greek government considered the discovery of sufficient importance to institute a thorough and careful exploration of the bottom of the sea between the two islands. During the last few months divers brought a large number of fragments and even fairly well-preserved complete statues and statuettes in marble and bronze to the surface and the exploration is still continued. The scene of the discoveries is of great historical interest. Cerigo is a hilly and fertile island of a little over one hundred square miles in extent. To the ancient Greeks it was known under the name of Cythera and it was believed to have been the island where Venus, according to a myth, had arisen from the foam of the sea, and was the seat of Venus worship. At one time it was a famous retreat of pirates. There is a strong current between Cythera and Anticythera and the passage between them was considered extremely dangerous by the ancient Greeks. Many ships were wrecked upon the precipitous rocks of the two islands and the bottom of the sea in the passage is strewn with wrecks. The statues and other art treasures which have been found are believed to have been part of the load of a ship which carried Greek spoils to Rome and was wrecked during a storm between the two islands. Among the works of art brought to the surface by the divers during the last few weeks is the marble torso of a young man, of beautiful proportions and workmanship, which is now supposed to be a fragment of a group of flute players similar to that in the Uffizi at Florence. The divers also found fragments of a bronze statue of over life size which is supposed to represent Hermes holding a ball in his hand. Other archæologists are of the opinion that the statue represented Perseus and that his outstretched hand at one time held the head of Medusa. Fragments of other statues in marble and bronze and complete statuettes have been found, so well preserved that it seemed almost incredible they had rested at the bottom of the sea for nearly two thousand years. All the art treasures brought to the surface are taken to Athens and placed in the National Museum, while the explorations under the sea are continued without interruption.

ASSOCIATION NOTES.

ST. LOUIS ARCHITECTURAL CLUB.

At the annual meeting of the St. Louis Architectural Club, held on April 3, the following officers and committees were elected: President, G. F. A. Brueggeman; first vice-president, James P. Jamieson; second vice-president, Charles O. Pfeil; secretary, Ernest Helfensteller, Jr.; treasurer, Charles H. Deitering; advisory committee, Edward G. Garden, Frank A. P. Burford; auditors, S. L. Sherer, Charles H. Deitering.

BUFFALO CHAPTER, A. I. A.

Under the auspices of the Buffalo Chapter of the American Institute of Architects a public meeting was held at the Twentieth Century Club on the evening of April 20 for the purpose of forming in Buffalo a municipal art society such as already exists in many other cities. The local members of the Chapter believe that such an association will be of immediate and lasting benefit to the municipality and will moreover direct its energies along a line heretofore practically unattempted.

The committee in charge of the meeting secured Messrs. John De Witt, Charles De Kay, John La Farge, J. Q. A. Ward, and others, of New York city, and John G. Milburn, and others, of Buffalo, to speak at the meeting.

The board of directors of the Twentieth Century Club coöperated in the movement and extended the use of the club building to the promoters of the new society for the evening of April 20. The Twentieth Century Club was represented by Mrs. J. J. Albright, Mrs. John C. Glenny, Mrs. Carlton Sprague and Mrs. M. D. Mann.

Architect John H. Coxhead is the chairman of the municipal art committee of the Buffalo Chapter and with him are associated architects Fred A. Wheeler and John F. Jackson.

WHAT THE LAW DECIDES.

BLUE PRINTS ARE PLANS.

Blue prints furnished by an architect, instead of the original drawings prepared by him, are "plans" within the meaning of a contract requiring him to furnish the plans of a building and entitle him to compensation for same. School Dist. *vs.* Fiske (Neb.), 84 N. W. Rep. 401.

PER DIEM DAMAGES DO NOT APPLY TO ABANDONMENT.

Provision in a contract to furnish stone for a building, that if the contractor fails to duly perform it by the time stipulated, he shall pay, as liquidated damages, $50 for every day he shall be in default, does not apply to a case of utter abandonment of the contract by him. Gallagher *vs.* Baird (N. Y.), 68 N. Y. Supp. Rep. 759.

OWNER LIABLE FOR DELAY OF SUPERINTENDING ARCHITECT.

If the architect employed by the owner to superintend the erection of a building, who is to direct the work, and is by the contract made the arbitrator as to its proper performance, delays the contractor unreasonably in his work for the benefit of the owner or other contractors, and by allowing other contractors to

obstruct the work, renders it necessary for the contractor to do it in an unusual manner, which adds largely to its cost, the owner is liable to the contractor for the loss resulting. Del Genovese *vs.* Third Ave. R. Co. (N. Y.), 57 N. E. Rep. 1108.

LIABILITY FOR DAMAGES WHEN BUILDING IS NOT READY FOR CONTRACTOR.

Where a party agreed to plaster a building within four weeks from the time of receiving written notice that the building was ready for plastering, a complaint which alleged that on notice that the building was ready the complainant incurred a large expense in transporting a number of men to begin the work, when the building was in fact not ready, stated facts sufficient to constitute a cause of action for breach of contract. Brown *vs.* Langner (Ind.), 57 N. E. Rep. 743.

WHEN OWNER REFUSES TO PAY FOR EXTRAS.

A declaration by the owner to a contractor that he would not pay more than a specified sum for extra work excuses the latter from a strict compliance with an agreement to refer to the architects a disagreement as to the value of his services. Munk *vs.* Kanzler (Ind.), 58 N. E. Rep. 543.

WHEN CERTIFICATE OF ARCHITECT IS NOT NECESSARY.

Under a building contract providing that final payment should be made when the building was "completed and accepted by the architect" a certificate of the architect of his approval of the work was not necessary to enable the contractor to maintain an action for the balance due him, as the matter of approval was one of fact. Devlan *vs.* Wells (N. J.), 47 Atl. Rep. 467.

WHEN OWNER COMPLETES CONTRACT.

Where a building contract provided that on the default of the contractor the owner could complete the work, "the expense thereof to be deducted from the amount of the contract," the owner in the absence of a showing of negligence was entitled to deduct the actual amount paid by him for such completion, notwithstanding expert testimony that it might have been finished for a smaller sum. Riley *vs.* Kenney, 67 N. Y. Supp. Rep. 584.

LIABILITY OF CONTRACTOR FOR MISTAKES.

Where a contractor in the erection of a building makes mistakes, which the owner is required to remedy by the building department of the city, the expense of same should be deducted from the agreed compensation of the contractor. Beek *vs.* Catholic University, 67 N. Y. Supp. Rep. 567.

RESTRICTING THE HEIGHT OF BUILDINGS.

An interesting decision has been handed down by the Supreme Court of Massachusetts, touching the right of the State, in the exercise of the police power, to limit the height of buildings to seventy feet on land adjacent to the new Statehouse. The owners of the land affected by the restricting statute brought suit to recover damages for this limitation of the right to build on their properties. The attorney-general filed demurrers to the suits. The Supreme Court overruled the demurrers and held that the plaintiffs' property could not be thus restricted without compensation. The purpose of the limiting statute is to prevent the Statehouse from being obscured by or from losing dignity and beauty from the proximity of very tall buildings.

The decision is believed to be the first of the kind in this country, and it may have its bearing upon ordinances of city councils of similar purport. It is held that the height of city buildings should bear a certain relation to the width of the street. The title to land extends indefinitely upward. The Massachusetts decision protects titles, as thus defined, from restriction without compensation.

BUILDING OUTLOOK.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, May, 1901.

Business conditions in the spring of 1901 are subject to a number of novel influences and conditions which make it particularly difficult to forecast from. Almost every week develops some new factor or impulse or opportunity which has to be reckoned with. The world — at least the building world — is putting on new harness which it somehow found hanging up ready for use. A mere enumeration of the new consolidations effected, of the new combinations formed, of the new enterprises undertaken, of the new energies set into action by capital, would not give a clear conception of the mighty power that has leaped into the saddle. To attempt a forecast would be a waste of time. It is necessary, however, to keep in mind that the great leaders in the world's greater activities are simply taking advantage of opportunities, not creating them, and that it is an invisible force or tendency that is carrying things with such an apparently high hand. It is not the actor that we need fear, if fear at all, but the action.

In a survey of business conditions the first clearly evident fact is that productive capacity in most lines is strained to full normal limits and that, despite that fact, there is no accumulation of stock, no tendency to weakness in prices. Everything is taut, tense, strained.

In the building trades the statistics recently published of proposed or pending operations in many leading cities evinces a purpose on the part of business and manufacturing interests to go ahead. They are driven to it. There is need of more house, office and shop and ware room in all our cities and in hundreds of smaller cities and towns. These necessities, however, are not leading to a rush or to speculative advances of raw material or to the hurried placing of contracts for material and supplies. On the contrary, conservation prevails. While prices of most lines of building material are strong, some pointing upward and a few actually advancing, there is hardly good grounds for expressing alarm over such an appreciation of values as may lead to discomfiture of plans and projects. Lumber is stronger than usual at this season. Iron and steel command high prices and builders are obliged to contract two to four months ahead. Brickmakers furnish encouraging reports of their industry. Window glass has been advanced out of proportion to other material, while paints keep nearer their old level. It is not always low prices that encourage building nor high prices that discourage. When houses, shops and offices are needed they are built.

There are several elements of strength in the present situation. The reorganization of our railway system is leading to enormous expenditures. Rail mills, locomotive, car and equipment shops are all crowded. The volume of freight and passenger traffic allows liberal expenditures for renovations and betterments. The good earnings and good dividends attract speculative buying by the general public, and Wall street for weeks has been submerged by a flood of orders for stocks that have sent prices skyward — so high, in fact, that prudent men are growing more and more apprehensive of a serious reaction that will wind up our present period of phenomenal prosperity.

Our export trade, which until within recent months has been the wonder of the world, is opening up vast possibilities for the marketing of our surplus products. The action of J. P. Morgan in buying the sixty-five ships of the Leyland line, which is to be increased to one hundred, will make it possible to carry American productions to all parts of the world.

OUR ILLUSTRATIONS.

Apartment Building, Denver, Colorado. W. E. Fisher, architect.

View in Hall, Residence L. A. Carton, Chicago. W. A. Otis, architect.

Frick Office Building, Pittsburg. D. H. Burnham & Co., architects, Chicago.

Residence, Southern California. An exterior and an interior view are shown.

Residence of Andrew M. Finlay, St. Louis, Missouri. E. A. Manny, architect.

Carnegie Public Library, Cheyenne, Wyoming. Patton, Fisher & Miller, architects, Chicago.

P. M. Musser Public Library, Muscatine, Iowa. Patton, Fisher & Miller, architects, Chicago.

View in Dining-room, Residence H. H. C. Miller, Evanston. W. A. Otis, architect, Chicago.

The Philip D. Armour Public School, Chicago. William B. Mundie, architect for Board of Education.

The John C. Coonley Public School, Chicago. William B. Mundie, architect for Board of Education.

Photogravure Plate: Second Church of Christ, Scientist, Chicago. S. S. Beman, architect.

PHOTOGRAVURE PLATES.

Issued only with the Photogravure Edition.

Residence, St. Louis. Barnett, Haynes & Barnett, architects.

Residence of H. Knight, St. Louis, Missouri. E. A. Manny, architect.

Residence for Andrew Sproule, St. Louis. Mauran, Russell & Garden, architects.

Warehouse for Park Fireproof Storage Company, Chicago. Holabird & Roche, architects.

Residence of W. Duncan, St. Louis, Missouri. Barnett, Haynes & Barnett, architects.

Second Church of Christ, Scientist, Chicago. S. S. Beman, architect. Three full-page plates are shown: Exterior and two Interior Views.

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BOARD ROOM AND OFFICE OF THE SECRETARY AND TREASURER,
1112 CHAMBER OF COMMERCE BUILDING.
CHICAGO, May 7, 1901.

Notice is hereby given to all persons desiring an examination for license to practice the profession of architecture in the State of Illinois, under the provisions of an act to provide for the licensing of architects and regulating the practice of architecture as a profession (approved June 3, 1897, and amended April 20, 1899), that applications will be received at all times on the blanks prepared by the Board, with affidavit attached, copies of which will be furnished upon application.

The first regular class examination for 1901 will be held at Chicago on June 19, 20 and 21. Applicants will receive notice of the place of examination, and a time-table of the exercises in due time after their applications are filed. Copies of the law rules of the Board and application blanks will be sent by mail, on application to the Secretary. Application for this examination must be filed one week before it commences.

By order of the Board.

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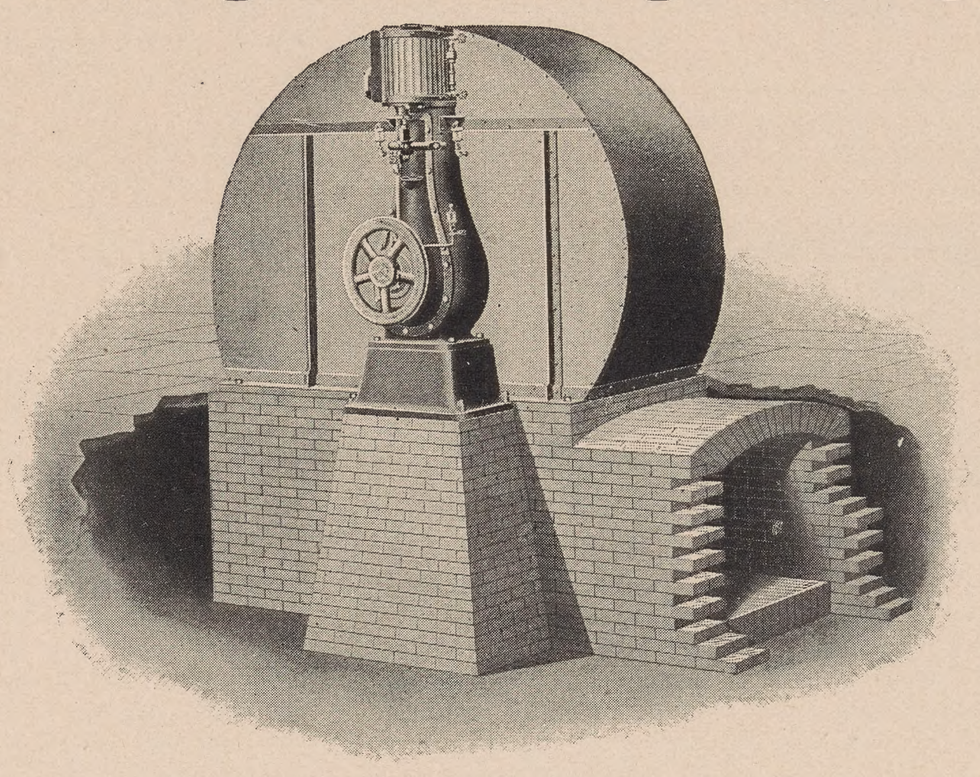

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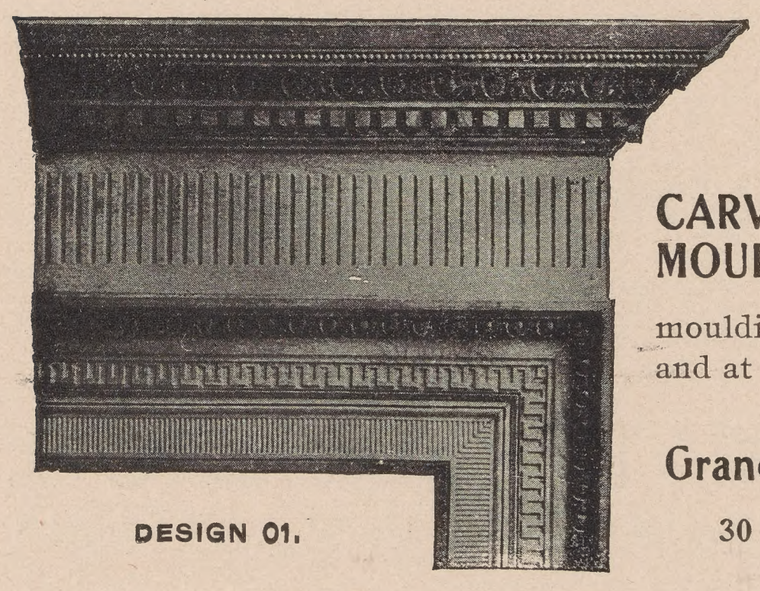

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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXXVII. ADVERTISERS' TRADE SUPPLEMENT. No. 4

A TEST OF THE ROEBLING FIRE-PROOF FLOOR.

The Roebling system of fireproof floors, which is used in the new Inter Ocean building, at Chicago, was tested upon the completion of the work on March 29 and 30 in order that the strength of cinder concrete put in during freezing weather might be determined.

The concrete was placed during the last week in January, before the building was enclosed, and the concrete was exposed to the weather at a temperature of a few degrees above zero. The concrete mixture contained one part of Alpha cement, two and one-half parts of Torpedo sand, and six parts of cinders. The beams were 15-inch, sixty pounds to the foot, and the span of arches 5 feet 7 inches from centers, with 2¾ inches thickness at the crown.

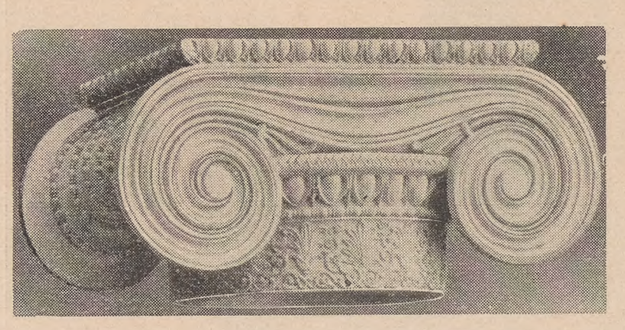
To test the strength of this arch, two slits three feet apart were cut through the floor from beam to beam; then a bed of sand two inches in thickness and 3 by 5 feet was placed on the arch. As a foundation for a load of cement, three courses of brick were laid over the sand and a platform 3 by 8 feet was then placed on the brick. This was done to give a larger base for the load of cement, which weighed 24,000 pounds, which occupied an area of fifteen square feet and 1,600 pounds to the square foot. These arches were centered with Roebling's patent stiffened wire centering and had been in

place two months, and under the test showed a total net deflection at center of the arch of ⅜ of an inch.

This test was witnessed by the architect of the building, Mr. W. Carboys Zimmerman; A. B. Andrews, superintendent; L. E. Ritter, engineer; G. N. Armstrong, representing the Inter Ocean Company, and many others. The test conclusively demonstrates that cinder concrete as put in by the Roebling Construction Company on its patent wire centering, can be placed in any kind of weather and at any temperature without injury to the fabric of the concrete.

EXTERIOR AND INTERIOR ORNAMENTS.

The reason why so much more ornamental detail is used on inexpensive buildings is very plain. The ornament itself is of the finest possible design and detail, rivaling



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the famous carvings in wood and stone of the past. The material is an imitation of the latter, but durable and appearing exactly like the material imitated. The price is so inexpensive as to enable architects to use ornaments on the lowest-priced buildings. The most of all used ornaments are capitals and brackets. The output of the Decorators' Supply Company on these articles has increased five times in two years. If you send for the 1901 issue of its catalogue on caps and brackets you will know why the manufacture and sale of these products have increased so fast. The Decorators' Supply Company, 215 South Clinton street, Chicago, manufactures ornaments in exterior and interior composition. The ornaments are artistic in design, durable in material and very reasonable in price.

TRADE NOTES.

THE GRAND TRUNK RAILWAY SYSTEM, the picturesque route to the Pan-American Exposition, will mail on receipt of 2 cents in stamps, sent to its city passenger and ticket agent, 249 Clark street, Chicago, the handsomest descriptive folder of the Pan-American Exposition yet issued.

THE Crane Company, Chicago, manufacturers of valves, fittings, etc., has decided to erect this summer a modern fireproof building exclusively for offices. It will be about 90 by 100 feet, five stories and basement, and will be located in the vicinity of its large cast-iron and malleable fitting and valve works, at Canal and Twelfth streets.

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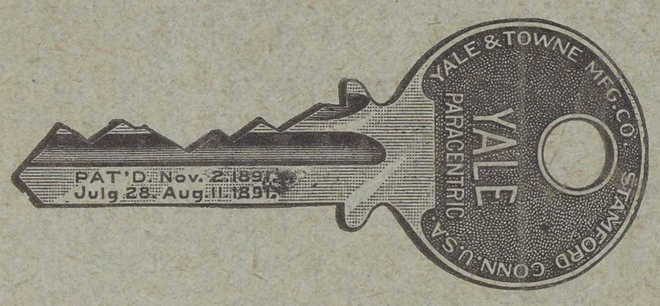

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